

Eco9 Teaches Students “How” They Learn

Shaun’s Story

When Mr. Shaun Donald was a student, he hated school because his dyslexia made it difficult to understand and contextualize what he was learning. The experience also taught him that students learn in many different ways. Some are visual or auditory learners, while others are solitary or kinesthetic (hands-on) learners. Now, as a visual arts and science teacher at E.S. Laird Middle School in Lloydminster, he and another teacher, Erin Claxton, recently created an Eco9 program to help students explore “how” they learn. Eco9 incorporates multiple subjects in one class, allowing students to see how subjects work together. Class time is divided between classroom learning, outdoor activities and community outings. And students are encouraged to experiment with different technologies, mediums and learning styles, which increases their chance of classroom success.

[View Shaun’s #theteacherproject video.](#)

The following guide provides information about how Shaun and Erin adapted existing outdoor adventure programs to create their own unique program to engage multiple learning styles.

1. What is Eco9 and what students are best suited for a program such as this?

Eco9 challenges students academically, physically and personally by encouraging them to spend time learning outside and in the community. It incorporates multiple subjects in one class to show the interconnectedness of the curriculum. This allows students to see how math, English, science and other subjects work together. It challenges students to explore new ways of learning outside the normal classroom experience. To be successful in Eco9, students need to be independent, reliable and have a strong work ethic. They also need a passion for ecology and social justice.

You can do a program such as this in several different ways. We designed ours for students with an average above 75 percent because these students have proven they can work independently. Eco9 also works well for students with averages

below 75 percent, who have demonstrated they have the drive to succeed. Students don't all need to be on the same academic level, but the more similar they are, the easier it is for the class to do projects and work together. It's also easier to teach a group of students with similar averages and work ethic than a classroom with a spectrum of learners.

2. Why did you want to create the Eco9 program?

I have been teaching art at the school for about six years. A few years ago I started teaching science at the Grade 9 level because I enjoy exploring new things and being challenged. I wanted my science class to be more hands-on and to get students out in the community. At the same time, the school division was looking at new ways for teachers to work with students. The division held meetings to see what the students needed. Our higher academic students told us they wanted to be challenged more. Our administrator approached me and once I got the go-ahead, I started looking online. I found a couple of programs out of Saskatoon, EcoJustice and EcoQuest. I read the websites and contacted the teachers. Erin and I went down for two days to see how the programs worked in their classrooms. We also visited Social Voices, another program in Saskatoon. All of these were awesome, but none were quite right for what we wanted. In Lloydminster, we're very much agricultural-based. Almost half of the school live out of town on rural properties and many are farming families. The other portion is focused on oil and gas, so we decided to make our program heavily based in agriculture and the environment. We pulled the program together and presented it to the principal. She took it to the school board and they approved it.

3. Why is it important for Eco9 to target multiple learning styles?

All students learn differently and have different styles for retaining information. Providing multiple learning styles, such as a lecture one day and then a hands-on assignment the next day, gives students an opportunity to learn which style works best for them. It teaches about their strengths and weaknesses so they can better understand how they learn. Are they someone who prefers to sit down and read a textbook? Do they need to watch a demonstration and then they can do that project? This class lets them experiment with different styles without it being detrimental to their education. If the textbook didn't work for them, the next couple of projects might be more hands-on. All projects are adaptable. Instead of doing a big painting, they could do an expressive essay or a sculpture to show they understand the overall concept. For example, our Braided History lessons teach about different cultures in the school. Students were broken into pairs. They had to come up with a flag from a country and paint it on a ceiling tile.

Not everyone is comfortable or good at painting, so one student did research about the country and what elements to include, while the other student did the painting. Another project with our Braided History involved doing a family tree. Students have to research to find out who their ancestors are and create a visual display. Some students are doing it on the computer, typing the names and moving pieces around using Prezi or Google Docs. Other students are drawing it on a big piece of paper and adding artwork. One student even welded his family tree. It allows them to experiment with different mediums and technologies.

4. What were some of the biggest challenges in creating Eco9?

It's important to get support from your administration and the other teachers in your building to work with a different schedule. Our schedule is very challenging because it's our first year. We don't have the students all day and Erin and I teach other classes. For example, this afternoon we're heading up to the Onion Lake reserve to speak with the band council and Elders about their history in the area, and how that history connects with our students and the history of Lloydminster. Erin and I need coverage for the afternoon to take the class up, so administration needs to get a substitute or we need to ask another teacher to cover for us.

Another challenge involved communication with parents. Some parents weren't sure if this program was going to work for their child. They came to meetings and asked a lot of questions. Obviously, parents want their kids to get a good education and to be ready for high school and wanted to know if students will still be ready if they aren't in regular classes. They asked questions we weren't ready for. Once we figured it out, we got back to them and shared how Eco9 would work with our math and science classes, how we would make sure students would still feel like part of the school community when we are gone a lot, and how sports and other extracurricular activities might be affected. We had to work with parents to increase their comfort. The other issue we are working through is that some students are not communicating with their parents about what's happening in Eco9. We feel strongly that it's the student's responsibility and part of their commitment to be in this class. Some parents were iffy about that. We still have a few things to work on, but the parents are very supportive.

The biggest challenge for Erin and I is keeping students on track and helping them learn time management. It's our first year, so it's going to take more time to set up a new program and assessments, but the assessments we have created are very bare bones. For example, with the family tree assignment, students have to identify their family tree and create a visual representation. We showed them a bunch of different family trees and then allowed them to take it in whatever direction they wanted. We try to leave assignments as open as possible. I'm a

hands-on, experimental person. If you tell me something isn't working, I'm going to play around with it until it is. Someone else may want to read the manual. I enjoy experimental learning because I find people learn best from their own mistakes. For example, students learn they might not be able to paint something for their family tree because it's too big and they don't have time. I'll ask, "What if you painted it smaller?" Then they realize they can still do it the way they want and on time, if they alter their plans. Or they might realize painting isn't working at all, so they need to switch tasks.

The one thing that wasn't a challenge was cost. You work with what you have. Students pay to be part of the program. We charge \$300, which provides a budget of about \$7,000 per year for busses and supplies. With more funding, you can do more. We are planning some fundraising activities, but I don't want to sign up for a bingo where the parents do the work because that doesn't teach students the value of fundraising. We've done one big fundraiser this year and received \$500 from our local kennel club, which runs a dog show every year. We went for four hours to help them set up and returned four days later to help them take it down. They had to do hard physical labour to earn that money. Students also run a business in the school selling popcorn. They learn how much it costs to buy supplies and how long it takes to make the product, how much we need to sell it for to make a profit and how to advertise. And last year, I applied for a grant through Peavey Mart for agricultural improvements in the community. We were awarded \$25,000 over the next two years, which is allowing us to expand our hydroponics room, garden boxes and to start a school-wide composting program.

5. How important is community support for a program such as this?

It's a give and take with the community. Right now, our community is giving us tons. Our program wouldn't run without community support. We visit local businesses and cram in 23 students. We've visited someone's farm. They took us in their combine and showed us all aspects of the business, including their financials and how much it costs to run the farm. Another business showed us how to take a bicycle apart and put it back together. Another showed us how to properly butcher an animal. All these opportunities show different aspects of our community and teaches the students about the importance of giving back. Now, we've got people calling and sending emails to come visit. When we choose a place, we want it to be fun but it also has to meet curriculum and learning goals. Eco9 is not about going places to see neat stuff, it's about learning to be a good citizen, how to respect yourself and how to treat others.

6. What advice do you have for other teachers who want to create a similar program?

Decide what you want to do as part of this class: what do you want to teach; what subjects do you like and what are you interested in? Then find or create a program that allows you to do what you love. In education, you need to follow your heart. If you want to be outdoors teaching students how to canoe, kayak or mountaineer, then find or create that. With Eco9, I get a lot of liberties to create what I want. I don't have to follow what everyone else is doing. I can teach things I want and get to share some of my personal values about being a good citizen and leader with my students.

But you don't need to create a whole new program. You can take your own class and change how you deliver it. I did that with my science class. It was very textbook-heavy and Smart Board oriented. I don't like that. It doesn't work for me, so I created more hands-on activities to support what we're learning.

If something interests you, start Googling. Take the initiative and do the legwork. There are lots of resources that can help. There are professional development opportunities throughout the province all the time. I know the Saskatchewan Teachers' Federation provides on a number of learning opportunities, so keep your eyes and ears open for things that interest you. For example, I don't teach physical education but I'm going to a clinic to learn how to incorporate more physical activity in my math and science classes.

And most importantly, don't be afraid to learn from other teachers. I am extremely open to sharing anything and everything about our Eco9 program. As teachers, sharing information is how we're going to better the education system and improve things for students. We can't get new programs and push education forward if we don't experiment with new ways of teaching. If teachers want to learn more about our Eco9 program, they can email me at Shaun.Donald@lpsd.ca.

