

**Show Transcript
Deconstructing Dinner
Kootenay Co-op Radio CJLY
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Title: Deconstructing Dinner in our Schools – Part I (Remastered)

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Transcript – Pat Yama**

Jon Steinman: And welcome to Deconstructing Dinner, a weekly one-hour radio program and podcast produced in the studios of Kootenay Co-op Radio, CJLY in Nelson, British Columbia. I'm Jon Steinman.

On today's broadcast of Deconstructing Dinner we'll be airing an encore presentation and remaking so to speak of a broadcast we aired back in April 2006. Titled "Deconstructing Dinner in Our Schools," the broadcast was intended to mark the first of an ongoing series on how the subject matter of this weekly program makes its way into schools. Now this series has never made it past that first show that aired back in April of '06, but in the next month or two, we will be airing the second in this Deconstructing Dinner in our Schools series. But until then, we've chosen to present yet again, part I of the series featuring the Earth Matters Farm-to-Table project that took place right here in Nelson. Earth Matters is yet again, offering this program to area schools this year. And so here is a remaking of the April 13th 2006 broadcast Deconstructing Dinner In Our Schools.

increase music and fade out

JS: With food being the foundation of our very survival, it would seem reasonable to expect that the social, political, cultural, and environmental issues surrounding food would be more common of an issue discussed throughout the media as any.

Using the topic of climate change as a perfect example, only now have media networks such as ABC chosen to acknowledge that climate change is indeed, real. But was all the science and speculation really all that necessary? Can it not be considered common sense that the more we take resources from the earth without equally giving them back, that our very environment will no doubt respond?

Well our food system is one of the fastest growing contributors of greenhouse gases.

So, in the case of ABC television, does their first foray into climate change in 2006 make any connections to our food choices, and how these choices are

key contributors of greenhouse gas emissions. Well, not at all. Accompanying the climate change feature on the ABC website is a flashy logo that reads *Hot Zone*, as though global warming is a brand name of sorts. And that web page is a resource of print and media-based articles that mention nothing of how our food choices impact the environment. But there is one mention of food that I came across on the ABC global warming web page and it was located right above an advertisement for Toyota of all things. And this food mention was a link to another ABC web page called Consumer Mom. And that is sponsored by Knorr, the Lipton soup brand owned by global giant Unilever.

Consumer Mom is a page of resources that helps mothers make better choices when purchasing such things as food. The information suggests mothers go out and purchase the very foods that are responsible for global warming – those that are highly processed and travel thousands of miles to our kitchens.

So if this is the kind of education that parents are receiving, where the mainstream media is directing those learning about global warming to websites sponsored by car companies and multi-national food companies who are shipping and trucking food all over the planet, then what sort of education could children be receiving on this topic – this topic of climate change and our food choices.

Well that's the topic of today's broadcast, the first of a multi-part series titled "Deconstructing Dinner in Our Schools." And this first broadcast will take a look at a progressive and innovative initiative that recently took place in Nelson, British Columbia. A project that saw children and teenagers learning about their food choices and how these choices connect to climate change. The program even saw students taken directly into grocery stores themselves, where products were pulled off of shelves and analyzed in depth. And this was certainly an exciting project and this will certainly be an exciting broadcast.

soundbite

JS: The subject of food in our public schools is one that has received a notable amount of attention in recent years. But as has commonly been the case here in British Columbia and around the world, food in public schools as a topic for discussion has solely focussed on the food that children are eating in schools, such as that which is available in cafeterias and vending machines. The province of British Columbia for one has set a goal to ban junk food in public schools by 2009.

But what about food as a topic for discussion *in* schools? How prevalent is this a component of school curriculums and province-wide testing? Well as we will find out from my guests on today's broadcast, not very prevalent at all.

So a Nelson, British Columbia-based group took matters into their own hands and developed a program that brought food issues directly into area schools and even brought the schools directly into grocery stores. And that group is known as Earth Matters, a youth-driven environmental organization that creates education and community development programs. We'll hear shortly from the two educators who conducted this program, but we will also hear from many of the students themselves, and hear what they thought of the program and what they learned. You will be amazed to hear children as young as nine years old speaking to me about climate change and how they make more environmentally-friendly food choices. We will also hear from two of the teachers who hosted the Earth Matters initiative, and listen to what they have to say regarding food issues as a subject discussed in public schools.

soundbite

JS: My first guests that we will hear from on today's program are Colleen Matte and Su Donovaro who were both the educators behind the Earth Matters program. The program was inspired by the federally-funded and country-wide One-Tonne Challenge which looks to Canadians to reduce their annual greenhouse-gas emissions by one-tonne. Colleen and Su took this challenge, connected it to our food choices, and created a multi-day program through which they could bring this all-important topic into public schools. They called it the Food-to-Table One-Tonne Challenge.

And I spoke with Colleen Matte and Su Donovaro here in our studios, and Colleen explained how the program got started. This is Deconstructing Dinner.

Colleen Matte: So we took the One Tonne Challenge and incorporated it with how people deal with their food choices. Because food choices are something that every single person has to make every single day. We found it was a really powerful way, especially to reach youth who aren't necessarily driving their vehicles and can't make those kinds of changes for their own lifestyle but they can have an influence on what they eat. So, we looked at things like how far is your food travelling to get to you. How much packaging is required. How much manufacturing and processing has gone into the food that you're eating. And also looking at organic versus industrialized foods and what the differences are, not just with greenhouse gases but also for people's health. And what kind of things that have been going on in our food industry that we're not really aware of as consumers. And also just bringing to light the power of being a consumer and how that can definitely affect the environment in which ever way you want it to.

JS: As the Earth Matters organization is a non-profit organization, financial assistance to get the Food-to-Table program into schools required the group to seek funding. And Su Donovaro explains who helped fund this initiative.

Su Donovaro: We were funded by the Youth Environmental Network, that was our primary funder and then we also got a micro grant from the Columbia Basin Trust. So that allowed us to have two educators instead of one educator which was really a big help because it's quite a large project. It's a short time span but we found that it really could have been stretched out for three, four, even more months because once the PR got rolling and people started hearing about the project through their friends or through other teachers or students then we had a lot of people who were interested.

JS: The Food-to-Table program was introduced into a number of different schools, two of which will be featured on today's program. One of these classes was an elementary school class of children in Grades 4 and 5. And with children of such a young age, there's certainly an amazing level of trust required by any teacher when putting such a complex issue into the hands of two people they don't know at all. And Colleen explains the level of support her and Su received when promoting this program.

CM: One of the first teachers that contacted us from the PSA was Marilyn from A. I. Collinson and she had actually done similar programming from her own initiative but this year wasn't able to fit it in through her own timeline. So she was super excited and she was actually the first person that we did a presentation for. So it was great to have someone who was super enthusiastic and really encouraged us to continue with the presentations and just really gave us a boost as we started off doing these. So that was really great. And every teacher that we've done a presentation for has been really supportive and has really enjoyed the program and the workshops that we've put on especially the supermarket tour. It's been a huge education for them as well. A lot of the teachers were even more enthralled with the program than a lot of the students were so it was great to be able to have such energy behind it and support and to know that they're going to reinforce the ideas in classes to come.

JS: The full two-day program that comprised the Food-to-Table initiative saw one day where an in-class presentation took place, while the second day saw a more interactive approach where students were brought directly into grocery stores.

I had the recent opportunity to visit the Grade 4s and 5s at A.I. Collinson Elementary School just outside of Nelson, and I spoke with the students about what they learned during the Earth Matters presentation. But more specifically I asked the students what they learned about the food they eat and how it relates to climate change. And I was shocked to hear how much they know. Take a listen.

Student 1: That stuff that's packaged like has three layers of packaging, it uses fossil fuels to create them and then it releases the gases into the air and then creates the greenhouse effect.

S2: And I learned that if we use like pesticides on like our grains and like vegetables then like animals like a mouse might eat it and then the snake eats the mouse and the hawk eats the snake. And then the hawk like gets all sick from the pesticides.

S3: I learned that transportation has to do a lot with the food you pick. Like if you get something from B.C. like an apple, it's a lot better than something from Brazil or something because transportation takes a lot of fossil fuels for the gas. And it's really harmful and it's really bad for the earth because it helps global warming.

S4: That packaging is one of the big things that's affecting the earth. Like if we buy better food, like instead of buying a Lunchable we take an apple then all that packaging from the Lunchable would be helping global warming.

JS: As Colleen Matte explained to me, there were a number of hands-on activities incorporated into that initial presentation and she explains one of these activities.

CM: The next game we play is the bingo game and what that is it's set up where the bingo spaces will say something like - someone in the class who's a vegetarian, someone who composts, someone who has a vegetable garden, someone who recycles everything they can. And then the students would go around and find people in their class that fit the description. And so that was a great way for the students to get to know what was already happening in their class and what their fellow students were doing and then find out some things about their classmates that maybe they didn't know before. And then also it provides a support too. Like you realize that other people are doing things that you thought or were maybe really hard to do like bringing your own bags when you go shopping, maybe you thought that that was something that's you know, impossible - nobody does that but then you find out that five kids in your class do that.

JS: And here is what the students told me they learned from that game.

S1: Well, we learned about that, like if, about like, say like composting and stuff like that it would be better. And like how many did like walk to school or biked.

S2: I learned that quite a few people are caring for the earth by using gardens, not buying their fruit and that some people reuse their bags like they have cloth bags so they don't have to keep continuously throwing away the plastic ones.

S3: I learned that there's not that many people who had composts and there's quite a few people who had gardens.

S4: Well the reason we did the bingo game is because if a lot of people recycle but some people still don't then those kids that don't recycle will want to be like all the other kids that do recycle so they'll start.

soundbite

JS: If you're just tuning in this is Deconstructing Dinner, a weekly one-hour radio program that discusses the impact our food choices have on ourselves, on our communities, and the planet. You can find out more about the program or listen to this very broadcast at www.cjly.net/deconstructingdinner.

Today's broadcast is the first of a multi-part series entitled "Deconstructing Dinner in Our Schools" and we're taking a look at how food issues make their way into school curriculums. And on today's part 1 of this series, we are taking a closer look into a recent Nelson-based initiative that saw a local environmental organization visit classrooms where they presented how food choices influence climate change. We were just hearing about the in-class presentations and activities that took place in a Grade 4 and 5 classroom. But the second part of the program saw students take a field trip to an actual grocery store where students were required to pull items off of shelves and discuss the history behind those products. We've been hearing from both Colleen Matte and Su Donovaro, the educators for the program, and we were most recently hearing from the students. Now, given that in many cases these products during the grocery store tour were being criticized, I asked Su Donovaro how they managed to arrange such an activity in a grocery store.

SD: We prepared a letter that we gave to Safeway and it actually was pretty smooth because Andrew, the person who did the presentation last year had to use Safeway as well. So I just gave them a letter with the dates that we had on it and I said if there are any problems contact me. And they didn't contact me, they didn't seem to be a problem. At one point they noticed us doing a tour – just sort of came over and asked us what we were doing and I explained, just kind of a basic outline of what we were doing and it seemed to be okay.

JS: I was fortunate enough to have joined the Earth Matters group and the Grade 4 and 5 students of A.I. Collinson Elementary School during the grocery store tour. And a selection of recordings from this tour have been compiled to give you the listener a better idea as to how such an innovative approach to learning about such a complex issue was organized. And here is a sample of the first activity where students were given the task to provide the origins of a fruit. And I will note that the sound quality is not ideal with some of these recordings especially when music and refrigeration units are much louder than young children in a grocery store but take a listen to this segment.

S1: We have an organic apple. It's from B.C. It didn't go through any processing. It's healthy. There was no packaging where we found it. And it's an alternative, as in like a healthy food.

JS: The next activity saw students undergo a taste test to determine whether environmentally-unfriendly pesticides taste better than organic methods of agriculture. And here is a recording from that activity.

Adult1: Does everybody have their opinion? Everybody, do you know which one you want to choose? Put your hand up. Okay, who chooses A?
1,2,3,4,5,6,7,8.

Who chooses B? All right, we've got a lot more hands for B. Why did you choose B? (repeats student answers) Fresher? Sweeter? Juicier? Tastier? What do you guys think is the difference between A and B? B was an organic apple and A wasn't organic.

S: Yes I knew that.

A2: More people notice if you grow it organically it's fresher and crisper and juicier and yummier. That's right. Wow. That was quite a different.

S: I know.

A1: They're exactly the same apple. They are both Fuji apples and they are both from B.C. but one was organic and one wasn't. And now we are going to split up into our groups again.

JS: And here's Su Donovaro explaining the activity that they organized following this taste test.

SD: Well, we had the kids go out and get five different products from Kraft – Kraft dinner, Miracle Whip, Jello, couple of other things. And then when we brought them all back we told them – guess what, Kraft is actually owned by Philip Morris and Philip Morris is a tobacco company. And they were really indignant, a lot of the kids like they were really amazed that this was happening.

JS: And here's some recordings from that activity.

A1: Second row tells you what aisle they're in so Group 1 you're going to go to Aisle 3 right here; Group 2 you're going to Aisle 3 to get Kook Aid; Group 3 you're going to Aisle 4 to get Jello; Group 5 you're going to Aisle 2 to get Miracle Whip.

S: Where will we meet when we've found it?

A1: When we're done we're going to meet just at the end of these rows by the meat section.

S1: It's sort of an alternative to them, I mean it is little bit healthy but not too, right?

A1: But what's something you can have instead of Kraft dinner?

Students: You can have spaghetti and cheese.

A1: Yeah, exactly. You can make your own pasta, you can make your own cheese sauce.

S1: Okay Jill, you're done.

S2: Which could be a lot healthier because then you'd know what the ingredients are.

A1: Exactly. Okay, where's Group 1?

S: We're right here.

A1: Okay, what did you guys find?

S: We found Kraft dinner. It's from Canada. It has a little bit of processing, it is not healthy. It has two bits of packaging and not an alternative.

A: Can you think of a healthy alternative? Instead of buying?

S: Like make your own sauce?

A: Yes, that's a good idea. All right, Group 5 what did you guys get?

S: Okay we got Minute Rice and it was from Canada and there was not much processing. But there was four healthy ingredients and there was only one layer of packaging and that was just the box. And then, it could be an alternative because you could buy the whole wheat brown rice.

A: That's right. You don't have to get the packaged stuff.

S: No.

JS: And this is Deconstructing Dinner. At this point during the climate change grocery store tour, I was amazed at the level of interest that these students had in learning about the food they eat and how different food items influence climate change. But with the Kraft activity being one to expose the companies behind the products, take a listen to the student's reaction when they're told what company owns Kraft.

A: Okay, all of these five foods, Jello, Kool Aid, Kraft dinner, and Minute Rice are all made by a company called Kraft and Kraft actually is owned by another company called Philip Morris. And Philip Morris is actually a cigarette company.

Students: Oh, ewwww. That's just disgusting.

A: Yeah. All that food is made by a cigarette company.

S1: Eww, no I don't want to eat Kraft Dinner anymore, ever.

S2: Yeah, I don't like it anyways.

S3: This is disgusting?

S4: Okay, next we have to...

A: So wait, let's just give a chance for the groups to put their things back to the ...

JS: And here is what one student had to say after she learned that Kraft is owned by a cigarette company.

S: I'm going to tell my dad that I don't want to eat Kraft dinner. I'd rather have like a sandwich or something.

JS: Hearing these kinds of comments coming from students was truly inspiring, that children as young as nine years old were learning about the real story behind the food they eat every day. And as we just heard in this one case, they're not supportive of it. And the grocery store tour was only just getting started. Su explains the next activity.

SD: So in this activity we asked one group of kids to go and find the most packaged soup product they could find and I think a lot of them were really quite stunned that there was so much packaging. The one that they did find was a little - one of those ones that you add hot water to the noodles. And I think there was like four layers of packaging - styrofoam and cardboard and the little insert with the powder seasoning. And they realized, a few of them that this was because there was so much advertising on this package of soup. I think one of the kids made the comment that you know the ingredients took up such a small part of the actual container and the rest of it was just like bright colours and you know - buy this product, it's so great and it's so fast and easy and quick.

JS: And here is a recording of the packaging activity and the ensuing group discussion.

A: Okay we want the most packaged soup.

1S: And it comes from Vancouver, has really high processing and not much healthy ingredients. It has more packaging on it, four layers of packaging. An alternative is probably homemade soup.

S2: And one of the healthy ingredients is having chopped fresh parsley into it but that's it.

S3: There's 22 ingredients.

A: 22 ingredients.

S4: And there's the bottle and the label packaging. And an alternative would probably be some homemade dressing that your mother makes.

A: What are the ingredients.

S4: There's like soya bean oil, water, sugar, salt, white vinegar, bacon, buttermilk powder, frozen yolk.

S5: It has lots of processing. The healthy ingredients are wheat and water. The packaging, it has tin and paper. And the alternatives, you could just use like fresh chicken or pork from a local farmer.

A: Yes, good job.

S6: It comes from Thailand and there's lots of processing. And there's five healthy ingredients and there's seven layers of packaging.

A: Seven layers of packaging!

JS: When I invited the organizers of this grocery store tour into the studio, we took a listen to many of these recordings, and Colleen Matte further commented on this last clip.

CM: With the packaging aspect of the tour we looked a lot at why do we actually have all this packaging and the big part of that is because we are transporting the food so far. Another big part of it is, a huge percentage of what goes into our landfill is packaging from our food because everybody has to eat every single day. So it's a huge way to cut down on what goes into our landfills and also a huge way we can reduce our greenhouse gas emissions.

JS: The next activity that was organized during the grocery store tour involved peanut butter, and take a listen to what the students found out.

A: Okay, Group 1, what have you got?

G1: Peanut butter and organic peanut butter.

A: And how hard is it to find the organic peanut butter?

G1: Pretty hard. They really pushed one in the back. There's like only one type of organic peanut butter.

A: Let me understand that you mean the organic peanut butter was hard to find but it's made in Canada. And that one, and it's right there at eye level.

G1: Just for a fact, this one is more runny than this one. So we predict that they added something to make this one more sticky.

A: Yeah there's a whole bunch of ingredients in that one, right? And also in that one.

G1: This one there's only like three ingredients. Dried roasted organic peanuts.

JS: If you're just tuning in this is Deconstructing Dinner and a remaking of the April 13th 2006 broadcast titled "Deconstructing Dinner in Our Schools." We're taking a look at how food issues make their way into school curriculums and are right now taking a closer look into a recent Nelson-based initiative that saw a local environmental organization take students into a grocery store where food choices were discussed and how these choices influence climate change. Truly an innovative approach to tackling an issue that is *not* discussed so much in our schools. We are presently hearing recordings from that very grocery store tour and having had both the organizers of this program Colleen Matte and Su Donovaro in the studio, Su explains the banana activity that we will shortly hear a recording of.

SD: Well we gave the kids a little sheet with a picture of a banana on it and we said imagine that you're spending a dollar on bananas at the store. How much of the money do you think goes to the farmer? How much do you think goes to the grocery store? How much goes to Dole or Chiquita or the company that's manufacturing the bananas and how much goes to transportation and taxes. And then we had them break up into groups and figure out what they thought would be the right percentage – how much each person should get.

JS: And here is the recording of that activity.

JS: What have you figured out so far?

S: We think the farmer gets about \$0.25 for each banana.

JS: Yeah.

S: And then the wholesaler gets about \$0.30 for each banana that the farmers give them.

JS: So now you have to figure out the grocery store.

S: Oh okay.

JS: What does the grocery store get?

S: I think 20 ...

S2: Okay for transporting and taxes. (and other talking)

A: Okay so the actual answer is \$0.05.

Students: Ohhh. What? You were right the first time.

A: He has to look after the land. He has to hire workers to help him plant the crop and harvest the whole crop.

A2: He gets \$0.05 out of the \$1.00 and has to spread them out all of the workers.

S: That's so not fair. That's a rip off.

A: Okay let's do the rest of them. How much do you think the banana company gets? Remember what were we talking about the transportation industry and what that costs?

S: It costs too much money and it makes too much pollution and it wastes too much fossil fuel.

A: Yeah, fossil fuels, right.

JS: As this last recording marked the end of the grocery store tour, I was very interested to find out whether all of this very complex information about our food was going to remain in the heads of these Grade 4 and 5 students. And so, I visited their school and I inquired into what they learned during the tour. And here is what they said.

S1: Well I learned that some of the water that's bottled is just tap water.

S2: And a lot of the packaged food has a lot of packaging. There's a lot of ingredients that I can't even pronounce.

S3: We found a sliced-up mango that said it was from Canada but really it was from like a far away country. It was just processed and packaged in Canada.

S4: And we learned about how food it can have a lot of ingredients on the back and that you should buy food that shouldn't have as many ingredients. That if you buy food with ingredients that you can't pronounce there might be something bad in there that you just don't want to eat.

S5: I learned that food has to travel more miles to get to the Safeway and stuff than they usually should.

S6: I learnt things like if you buy fruit from far away places the person who actually produces it, the farmer, only gets a few pennies out of the dollar. Like he gets very little and the people who get probably the most money is the people who transported it, the people who like packaged it and stuff and the store that sells it. And the farmer gets very few money out of it all. That's why I try and get fruit from B.C. and like things from around here more. And that's why I got my mom to start growing things in her garden.

JS: One important concern that remained in my mind during the course of this program where food choices were discussed in the context of climate change, was the concern that these children are not the ones purchasing food. So how is this important information making its way to the family members that are, typically the parents. And here's how the students brought these issues into their home.

S1: I told my mom that we learned at the grocery store that in one year Americans spend more money on fast food than on their kids education.

S2: Well I told them that if we keep buying and producing this much garbage then we'll need four more planets to live on so that we can keep on living this way.

S3: I told my granddad not to buy the, there was so much packaging on this one thing I had told him not to buy it for me and I said I don't want that next time.

S4: I learned also that packaging, like when I went home I told my mom, my dad, and my grandma that packaging and food choices is one of the biggest thing that's harming the earth.

S5: I asked my mom if we could start using like our backpacks and like bags we could reuse and now we're using those kinds of things so it's way better for the environment.

S6: I was trying to get my parents to stop buying TV dinners and stuff like that with really lots of packaging because it's got the cover that goes over top and the box and the box that holds it.

S7: I told mom that it would be better if we ate less meat instead of more meat because then we'd have a healthier diet and stuff. And also, we learned that like cattle, it was like they had to cut down like rain forest to make more room for them, for like grazing and stuff. And also that there was like they're stuck in small pens and then they had to be fed antibiotics and stuff.

S8: I got my mom to start giving me more garbage-free lunches so I don't produce as much garbage anymore.

S9: I told my mom to buy more fruits and vegetables from B.C. and she's doing that so she's getting more healthy stuff for us.

soundbite

JS: And this is Deconstructing Dinner and we've been listening to the Grade 4 and 5 students of A.I. Collinson Elementary School located in Nelson as they explained how the important issues they learned about food choices and climate change were brought home to their parents. And these issues were presented to them by the Nelson-based group Earth Matters.

So often in public schools students are fed information that holds very little relevance to their daily lives. The topic of food and how food choices relate to climate is *not* a topic that is commonly found discussed in classrooms. But the relevance of such a topic was best illustrated by the ways in which these students brought what they learned home to their parents. But this enthusiasm did not stop there, and I had the students explain to me some of the initiatives that they have launched since they participated in the Earth Matters program.

S1: Well after Colleen and Su did the presentation, we did a play about all this and we did it to all the classes and we've been doing like garbage-free lunches and picking garbage around the school and stuff.

S2: And we have smaller garbage cans like those ones over there, like ice cream buckets instead of the big giant garbage can now so that people can't throw away as much stuff even if they want to.

S3: Some of the Grade 5s have, they've been doing the garbage-free lunch and like they put warning signs up about how like every once in awhile they'll do a garbage-free lunch but you won't really know about it so it'll force kids to just so every day so they don't have and then they can get house team points so then they don't have that garbage-free lunch.

S4: We built a game nagging their friends about not having a garbage-free lunch so they just make it a garbage-free lunch because they don't like being nagged anymore.

S5: When we pick up garbage we found a whole bunch of reusable sandwich bags that could be reused instead of just throwing them on the ground.

S6: That garbage that we found was just what we littered so if we imagine how much we actually throw into the garbage then it's a lot.

JS: And the last question that I presented to some of the students before I left their class was the all-important question to have them deconstruct their lunch, and here are two students doing just that.

S1: I believe I have a sandwich in a reusable bag and some crackers and cheese in a reusable bag (laughs).

S2: I have a sandwich in a plastic container and some fruit in a plastic container and some water in a plastic container.

JS: I concluded my visit to A.I. Collinson Elementary School by briefly speaking with Marilyn Lawrence, the teacher for the class that participated in the Earth Matters Food-to-Table program. And she explains what she thought.

Marilyn Lawrence: The students responded terrifically to these two young women. And their activities were interactive, they were relevant. And they left the students with a plan for action which is of course the next step we can get the students all the knowledge about it but what now are they going to do with the knowledge. And they had built that into the presentation.

JS: And Marilyn concludes by making a very important observation regarding the effectiveness of such an innovative program.

ML: It was all very relevant to them. What they had never done before is go to the supermarket and I think that was a very powerful part of it because this age group has huge power with their parents as far as us shopping goes. They still shop with their mom and dad whereas older students don't. So the impact that they have when their parents go to the local shopping store is probably huge.

JS: If you have missed any of today's program or want to find out more about today's topic, you can visit the Deconstructing Dinner website at www.cjly.net/deconstructingdinner.

For those of you who are perhaps just tuning in to Deconstructing Dinner, today's broadcast is the first of the multi-part series entitled "Deconstructing Dinner in Our Schools," where we will investigate how food issues make their way into classrooms and issues that focus on how our food choices impact ourselves, our communities, and the planet.

On today's program we have been taking a closer look into an initiative that was recently conducted here in Nelson, British Columbia and developed by the Earth Matters in conjunction with the country-wide One-Tonne Challenge. The innovative program saw students learning about how their food choices influence climate change – a topic that you will hear just shortly is *not* discussed in public schools.

The first half of today's broadcast has focused on one class that participated in the Earth Matters program, and those were the Grade 4s and 5s that we were just hearing from. But yet another class that participated in this program was a group of Grade 12 students who are enrolled in an Environmental Science class at L.V. Rogers Secondary School also located here in Nelson.

I had the opportunity to speak with the teacher of this class, Karl Machado, who I invited into the studio to speak with me about the program his students participated in. And this was the second year that Karl hosted the Earth Matters Food-to-Table program as he believes the content fuses with that of his Environmental Science class.

Karl Machado: It's called Environmental Science and specifically it's wildlife and environment, so how wildlife is affected. But climate change is sort of scattered through the curriculum. They do climate change in some science classes sort of 7, 8, and 9s science classes they'll touch on climate change. They might do it in Social Studies as well. In the senior classes in Geography 12 they'll talk about climate change, the physical principles of climate change like the Albedo Effect and things like that. But climate change is from a biological perspective is the biggest issue right now so that's why we took a course and half the course is devoted to climate change.

JS: Karl explains whether the topic of food choices in relation to climate change and politics is ever discussed in schools.

KM: No it isn't. No. That connection is inferred but it's not developed, at least I don't think it's developed in my scope of what I've seen. And students are really interested in food choices. When I went to school you would just eat what your parents ate basically. And now when I look at my Environmental Science class, out of 20 students we have about 8 of them that are vegetarian and then some of them are specialized vegetarian. They take a lot more empowerment of what they're eating and they know more about it than we ever did and they're interested in it.

JS: I asked Karl to comment on the initial presentation that both Colleen Matte and Su Donovaro conducted as part of the Earth Matters program, and he explains the itinerary of this program.

KM: It was great because I could present on climate change but when you have young people coming in and presenting, students are much more

stimulated and much more open and receptive. So they initially came in and they did a PowerPoint presentation which was a general, broad presentation that gave the components of climate change and then they began to focus more on the food choices. And that went really well as an opener and a stimulator. And then from there we, the next day we went to Safeway and we did a walk through Safeway and it was very hands-on. There was a lot of activities for kids to actually pick up products and look at them in a different way and critique food products and look at alternatives. And students really enjoyed that. From there, the Earth Matters people came back into the classroom and students were involved with a debate, a classroom-wide debate. And it was very stimulating. Kids had to choose either on seven different topics that had to do with climate change, if they were for or against it and debate against each other.

JS: I had the opportunity to record the very presentation that was conducted at L.V. Rogers Secondary School and now we can better understand the scope of this program. And here's a clip of Colleen Matte explaining the basics of greenhouse gases and climate change.

CM: The greenhouse effect is something that naturally occurs. This is how we got our atmosphere in the first place. Before we were basically like the moon, we were just a big rock and then volcanoes started erupting and releasing CO₂. And from those gases we started getting this layer over the earth and that is basically how life was able to be sustained on earth. Because having this blanket around allowed it to be warmer on the surface of the earth so allowed things to start happening and gases to start morphing into plant matter and water and all those things and actually here we are today. So the greenhouse effect is very important but what's happening with what we're doing is adding more and more gases that cause the greenhouse effect. So before when it may have been like a light sheet over the earth keeping it at this great temperature that we needed to be at we are now putting like a whole wool blanket over the earth. So we're really trapping in that heat, and none of it's escaping back into the universe.

JS: As was the main focus of the program, one of the fastest growing contributors of greenhouse gases is our transportation-dependent and intensive agriculture-dependent food system. And Colleen and Su made the connection in their presentation.

CM: Another thing about that too is big businesses going into communities where they did have the old type of farming happening where they had the markets and everybody brought their own little bit of produce in. They're going into those farms that may have been able to produce 10 different kinds of food and say okay, we need coffee beans; we want your farm to be coffee beans and we're going to pay you for that. So then their entire land becomes homogenized and they just end up growing the one thing. And then in turn, the farmer isn't able to feed his family because before they had 10 different foods that they would also sell to the markets but that's what they ate as

well. But now they just have this whole crop of beans that they can't do anything with as far as feeding themselves. So it's a big, big issue.

SD: It's a shocking loss of biodiversity too when you look at the foods that we rely on. When you rely on about 10 or 12 major crops for most of our food. When I was farming on Saltspring, I was working with a man that did seed saving and he had so many varieties of like tomatoes - like 400 different varieties of tomatoes, 200 varieties of lettuce and I was just astounded. I was like when you go into the grocery store you just see you know, your iceberg lettuce, your romaine lettuce that's come from wherever somewhere thousands of kilometres away. That's what we've been kind of programmed to believe is like we don't have this choice.

JS: As was heard during the beginning of this broadcast, the second part of the Earth Matters program involved a grocery store tour, where students were given the task of pulling items off of grocery store shelf and discussing their origins and methods of production.

During my conversation with Karl Machado, the teacher for the class that participated, I asked him to comment on the tour.

KM: You know I find that in the curriculum and mainstream curriculum it's so much more difficult to have kids out of the school. There's just much more parameters holding them in there and you've got curriculum pressure but when you created your own curriculum you can get them out. The further away at times you can get them away from the school, the much more open they are to learning and the more stimulated they are. And in both cases you could see that happening. You could see the wheels turning and they're bright-eyed, they're not sort of glazing over and falling asleep and they're asking questions mostly.

JS: And here's one quick clip from that grocery store tour.

S1: We've got sliced apples in the packages, comes with packaged caramel dip. I guess it's probably to try to get little kids to eat their fruits. But it's obviously pretty overkill.

S2: And also, the apples are staying like white, they're not browning so I don't think they use lemon, so I'm guessing they're using some kind of preservative to keep it's natural colour after it's cracked.

JS: Having had the opportunity to record the grocery store tour that we just heard a clip from and sit in on the classroom presentation, I was amazed at how the topic of food choices and their relation to climate change could be presented in such a meaningful and effective way. I was further amazed to learn that this form of education is not a part of standard public school curriculum as it seems like it should. And I invited two of the students from L.V. Rogers Secondary School into the studio to discuss this. And I spoke

with both Amber Johnson and Sarah Miles, and right off the bat I asked Amber whether food issues were ever a topic throughout her 14 years of schooling.

Amber Johnson: Food was never really incorporated into any of my classes except for like in PE 10 we kind of went over like diet issues more but not really healthy food choices, no. In cooking class we made food but it wasn't anything like healthy organic or anything.

JS: I asked Amber if she already knew about how food choices impact our environment and contribute to climate change.

AJ: A bit yeah. Like more I knew about like the healthy aspect of it like organic but I didn't know so much about how it contributes to the levels of fossil fuels and stuff like that in the environment. So that was good to know and helped me choose healthier and better choices for the environment.

JS: Sarah Miles explains what she thought of the Earth Matters presentation.

Sara Miles: A lot of it was stuff I had heard about and had an understanding of slightly but they went into more depth and connected things a little more for me. I found some of it was hard to believe but it was really good to get the connections between food and like I've never looked at climate change affecting my food choices and food choices affecting climate change.

JS: Amber explains whether she thought the second component of the Food-to-Table program, the grocery store tour, was effective.

AJ: I thought it was very effective to like be able to see the names behind the corporations we were talking about. But in the Safeway one I kind of felt it was very negative, like there was no positive really aspects to the presentation. And it would have been nice to have a little bit of positive because not everyone can afford like to go to the co-op maybe.

JS: If you're just tuning in, this is Deconstructing Dinner, where we just heard a clip from a grocery store field trip that Grade 12 students at L.V. Rogers Secondary School participated in as part of a program that discussed how food choices are connected to climate change. The program was created by the Nelson-based Earth Matters organization and focused on a topic that is not covered in public schools. So this truly was an innovative and unique program.

And Amber Johnson, explains what else she learned during the grocery store tour.

AJ: For example they just got an organic produce I believe section and Colleen and Su told us that out of the 28 items only two were grown in Canada. So it would be probably good to choose those two items, like more

leaning away from the bigger corporations stuff and to stuff that supports local. Like Safeway doesn't have a lot or maybe even much of it but leaning towards that.

JS: One of the most interesting moments during the grocery store tour was standing in the aisles and deconstructing the very food on the shelves. The store was of course open to the public and many customers would reach by the students and grab the very products that we were discussing. And Sarah Miles explains.

SM: Well when we were actually examining products and people would come up looking for those products I wanted to tell them what we were doing and we were looking at jello or something and this lady came up and picked the most grotesque pink and green and blue jello and we were just talking about that and how like Philip Morris owns Kraft and all this. And she went and bought that (laughs).

JS: I asked Sarah what she would have said to that woman if she had the chance.

SM: Maybe just – did you know (laughs) that these people are behind it? And let her make her choice either way because I don't want to make peoples choices for them.

JS: I will note that for sake of time, we won't be able to explore the final two components of the Food-To-Table program which consisted of an in-class debate as well as a secondary grocery store tour of a local organic food store, which I will add was a tour that was initiated by the students themselves, with the hope that alternatives to large-scale food production could also be explored.

But with all of the many components to the Food-to-Table program, the real question became how this education had impacted the students lifestyles. And so I asked Sarah whether the program has changed her approach to purchasing food.

SM: Consciously when I'm shopping or looking at food I look at where it comes from and who's making it and who owns it. Yeah I've started to pay more attention. Since then I've been really interested in it and been researching the big corporations and what they own and what products they have. And I've been trying to avoid those as much as possible (laughs).

JS: Sarah comments on whether or not she thinks food issues should be incorporated into school curriculums.

SM: Well there's so many classes that could deal with food. There's Social Studies that could deal with the transportation and like human stuff. And then like foods courses could think about healthy choices instead of just how

to cook. There's so many courses that could have a segment on food and dealing with the misuse of our food.

JS: While this innovative approach to learning is one that is not so prevalent in our school system, coincidentally enough, the very class that participated in this Food-to-Table program was an Environmental Science class, that Karl Machado, the class's teacher created from scratch. And he explains how he went about doing so.

KM: Right now the graduation program at the high school has been changed and it's been open so that it allows teachers to develop their own courses. But those courses have to be, they're called BA courses, they have to be board authorized courses. And once they're authorized they go to the Ministry and the Ministry will authorize them and then any teacher in the province can actually take that curriculum and teach it. And it gives a lot of power to teachers to create curriculum and interest that students love to be involved with. And I found that when I was teaching some of the mainstream biology's they were interesting but they didn't touch kids as much as some of these local, you know these global issues and these local issues. And I've had a lot of interest when that's happening. And there are a lot of new courses that are being opened up right now through this initiative, through this new graduation program change.

JS: Well if a class can be created as easily as Karl just explained, then maybe it's not so far off that a class that focuses on food issues can also be created. Karl describes whether this would be an easy process.

KM: It's an easy process and it's not such an easy process at the same time. The documentation takes awhile to go through. I mean there's detail documentation you need to prove that you've got educationally sound objectives; that you're going to be meeting those objectives; that you have resources to meet those objectives. So, you have to pull a lot together to have it approved. But once it's approved you know you can go wherever you need to with it. So what are the barriers that exist right now. The barriers that are existing is that a lot of courses have become provincial examinable. So what that means is that they're very curriculum-driven. You have to complete the curriculum so that the students are prepared to write the provincial exams. Those provincial exams, there's administrators and Ministry people look at those numbers. Your district people/administrators look at those numbers so it's really number driven and it takes it away from just the love of learning. You have to learn because you need to get these marks in place that you can move into your future direction and get accepted into these different programs. And teachers are, you know you need to have time and space to develop these. And then of course you can develop them and then because of the declining enrolment issues that are happening in the district and around the province, you might lose that. You may spend a lot of time doing it and not get anything back from it.

JS: The inability to fit such important education into school curriculums has been discussed on this program before. It was brought up when one of my guests indicated how difficult it is to incorporate the subject of gardening and growing one's own food into the already-congested curriculum in Ontario schools. With forward-thinking teachers such as Karl Machado who are so inspired to alter the standard curriculum and create a class from scratch, it still remains difficult to do so. And one of the most interesting points made during my conversation with Karl, was when he used one example of how Ministry-set policies posed a hindrance to him incorporating a subject into the curriculum that he created.

KM: So for instance in the Bio 12 course there was a section, it's Biochemistry and Physiology. And there use to be a section on cancer. And I wanted to present more on food choices and anti-cancer agents in foods. And students were very stimulated by that. You know it's so depressing about cancer statistics but at the same time realizing that the food choices you make as a young person and the anti-cancer agents in them how that can mitigate cancer, the effects of carcinogenesis. That cancer section was cut out because it wasn't sort of hard science. And so the food choice section got cut out as well. So there was an interesting section that could be expanded but again you had to come back to tight curriculum.

At the lower grades you have much more space so that's why kids I find younger kids are so excited and optimistic and open and innocent to pick up anything. And later on they become very focussed in the outcomes of courses rather than the interest themselves in learning.

JS: I asked Karl to further explain whether food issues should be discussed in schools at a younger age.

KM: You know you're guided by your parents and you can be guided in different ways. You know as time goes by it's nice when students become a little more critical and they realize well they can make choices themselves. And these students, their parents might for instance, eat one thing at the table and they'll prepare something else so it's much more complex.

Should students be learning about food choices at a younger age? I think they should because I think they're going to be interested in it. And as they go into higher and higher grades I think they can be presented with much more complex information and if they have already a grounding and understanding about food choices they'll be able to be much more receptive and go into further depth with those at higher levels.

JS: I will remind listeners that today's broadcast has been the first of a multi-part series that will take a closer look at how food issues are making their way into public schools. It may seem as though the Ministry of Education is making little effort to incorporate such an important and relevant topic. But there is one initiative that will be the focus of an upcoming broadcast and

that is the Ministry of Agriculture's "Agriculture in the Classroom" program that has been designed to bring farming and food production education into classrooms throughout the province. And resources are provided for teachers to do so. But it seems that perhaps awareness of this program is not making its way to the most important people. And I asked Karl if he knows about the Agriculture in the Classroom initiative.

KM: It isn't. I don't know so much about it. I'd be very interested to find out more about it and use it as a resource because I want to run the course in a way so that it's sort of student-driven. If students want to go further with a section then we can expand it and go to something like this. And if they find they know enough about it, they've got a good grip of it and they want to go into another section then we can move that way. And it leads to much more exciting classrooms when students decide and choose where they want to go rather than exterior outputs and curriculum pressures that way. So I'd be willing to take a look at it. As well as you know Foods 12 teacher who's actually cooking the foods and it could be incorporated there as well.

JS: And a reminder that today's broadcast of Deconstructing Dinner has been a remaking of the April 13th 2006 broadcast titled "Deconstructing Dinner in Our Schools – Part I." And you can stay tuned for more episodes of this series in the coming months.

ending theme

JS: And that was this week's edition of Deconstructing Dinner, produced and recorded at Nelson, British Columbia's Kootenay Co-op Radio. I've been your host Jon Steinman. I thank my technical assistant John Ryan.

The theme music for Deconstructing Dinner is courtesy of Nelson-area resident Adham Shaikh.

This radio program is provided free of charge to campus/community radio stations across the country, and relies on the financial support from you the listener. Support for the program can be donated through our website at cjly.net/deconstructingdinner or by dialling 250-352-9600.