

# Growing Garden Education

From *Growing Together at Weledeh* to Beyond



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Submitted by:  
Ecology North

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# ECOLOGY NORTH





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## 1 FROM *GROWING TOGETHER AT WELEDEH* TO BEYOND

The *Growing Together at Weledeh* program has been the root of Ecology North's local food growing programs since 2010. Ecology North was excited to celebrate the program through the *Weledeh Garden Case Study* (2016). Further to the findings from the case study, Ecology North has collected student feedback and evaluations of the program. The findings are analyzed below. Moving beyond the *Growing Together at Weledeh* program, a new program is taking root, curriculum has been developed to serve schools throughout the Northwest Territories (NWT) and Ecology North has been branching out.

## 2 THE PROGRAM: *GROWING TOGETHER AT WELEDEH*

*Growing Together at Weledeh* is a school-based gardening program that facilitates hands-on learning with students, teachers, and volunteer community garden mentors. Students have been learning the joys of growing their own food in the garden for the past six years. Weledeh Catholic School (WCS), the Yellowknife Community Garden Collective (YCGC) and Ecology North work together to deliver the program each year.

The program has six-weeks of educational activities to stimulate the curiosity, skill-development and confidence of Weledeh School students in growing vegetables at the Weledeh School Garden. The program runs in May and June. At the end of the garden season, in September, fall harvest celebrations bring together student gardeners, their families and volunteer garden mentors.

The goal is to engage Weledeh students and staff to plan and plant garden plots. By working with volunteer garden mentors, the program supports the development of skills, as well as building community through intergenerational learning and interaction. The first-hand experience of growing and harvesting a garden can stimulate students' curiosity and interest in food production and healthy locally grown foods.



### 3 THE CASE STUDY

In 2016, Ecology North celebrated the five-year anniversary of the *Growing Together at Weledeh* Program by composing the Weledeh Garden Case Study. The Weledeh Garden Case Study details the program goals, partners, activities, and explores program benefits, successes, and challenges. A vision for the future is also discussed with the founding members of the program. Internally at Ecology North, the plan is to scale back support of the Weledeh program in order to better serve fledgling programs at other schools. With the realization that to truly be a successful program Weledeh needs to be self-sustaining without (or with very little) Ecology North support. Survey results indicate a strong support for a continued partnership among the founding partners, as well as a five-year 're-visioning' exercise to renew the shared vision between Weledeh Catholic Schools, Ecology North, and the Yellowknife Community Garden Collective. Ecology North is proud to celebrate the *Growing Together at Weledeh* program. We are grateful to all the volunteer garden mentors, who contribute to making the program a success. This case study is available on the Ecology North website at <http://www.ecologynorth.ca>.

### 4 THE STUDENT EVALUATION

#### 4.1 METHODOLOGY

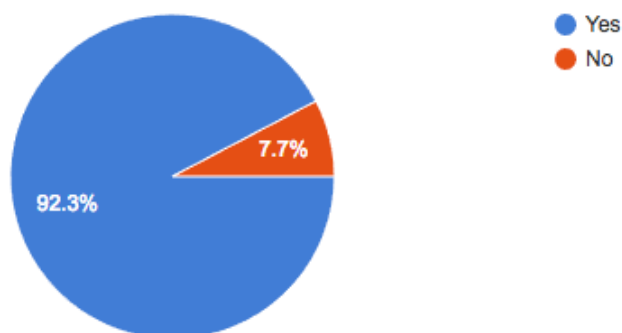
Students completed an anonymous online survey at the end of the 2016 *Growing Together at Weledeh* program. It was important to get student input before the end of the school year. Although the mismatch between the growing season and school year meant these students had not yet harvested their gardens. Nonetheless, they participated in the six-week education program and were in a position to provide valuable feedback. Some students also participated in Garden Club, however this survey was focused on the class participants. Students filled out the online surveys under the supervision of an Educational Assistant in their classroom. Ecology North was not present, and in no way influenced the survey results.

#### 4.1 GENERAL FEEDBACK

Students were asked whether they like the program, and specifically what they like or dislike. 92.3% of students **like** the *Growing Together at Weledeh* program, whereas only 7.7% **dislike** the program. Planting is one of the students most liked features. Some more unique answers include "I liked that we got to work together," "I liked being able to make friends who like the same things as me," and "I would love to keep going." The most disliked aspect of the program was weeding. Getting messy got both a positive and negative review from students.

#### 4.1.1 SURVEY RESULTS - QUESTION 1

Did you like the Growing together at Weledeh garden program?



#### 4.1.2 SURVEY RESULTS - QUESTION 2

What did you like or dislike?	
• I like planting seeds.	• I like planting.
• planting	• I like how you can plant whatever you want
• I like getting messy	• planting
• I like how you get to plant stuff.	• I like that we get to plant stuff
• I liked when we are growing the plants	• that I like that I had some fun with my friends. I didn't like is that there was a lot of weeds
• I like that we can plant	• I like weeding
• I liked how we got to plant seeds.	• I liked that we got to work together.
• I love planting in the garden	• nothing
• I like planting	• I wasn't there for long enough to experience if it was good or bad
• The only thing that I disliked is when kids had the hose and sprayed people. I liked when everyone worked together.	• I like to plant and do the routine
• I disliked weeding	• I would love to keep going
• I don't like the dirt.	• the weeds
• I do not like when I dug holes, because the dirt got in my nails. I liked being with my friends.	• I liked being able to make friends who like the same things as me.

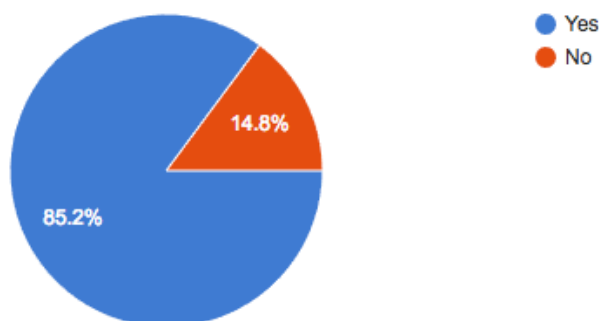
## 4.2 PROGRAM GOALS

Educational activities to stimulate the curiosity, skill-development and confidence of Weledeh school students are core values of *Growing Together at Weledeh*. Overall program goals include planning and planting vegetable garden plots, and developing interest and skills in producing healthy locally grown foods. The planting goal is achieved each year during the planting session. The evaluation survey allowed us to gain a better understanding of overall development of interest and skills. Questions 3-5 explore the impact the program has on student's interest in gardening, willingness to try new vegetables, and frequency of eating vegetables.

### 4.2.1 SURVEY RESULTS - QUESTION 3

**Did the Growing Together at Weledeh program make you and your family want to garden more?**

(27 responses)



### 4.2.2 SURVEY RESULTS - QUESTIONS 4

**As a result of the garden, did you or your family try any new vegetables that you had never had before? If so, what?**

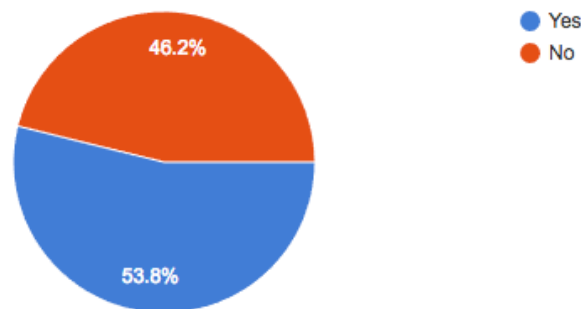
- |                              |   |
|------------------------------|---|
| • No                         | • Yes, pineapple, nasturtiums   |
| • Yes: zucchini              | •   |
| • Yes: red onions and squash | • No  |
| • No                         | • No  |
| • Eggplants, nastrussiums    | • No. Because the ones in my garden had better results than the one in club |
| • Zucchini                   | • I tried green beans.  |
| • Nothing.                   | • No.   |
| •                            | • We tried every vegetable  |
| • Peas                       | • Yes, because it's very very fun.  |
| • Radish                     | • No  |



<ul style="list-style-type: none"> <li>We can't plant because we have rocks around our house</li> </ul>	<ul style="list-style-type: none"> <li>peas</li> </ul>
<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li>Gramma' garden is already planted so maybe next year.</li> </ul>
<ul style="list-style-type: none"> <li>no</li> </ul>	<ul style="list-style-type: none"> <li>Not really</li> </ul>

#### 4.2.3 SURVEY RESULTS - QUESTION 5

**Do you and your family eat more vegetables now, after the program?**  
(26 responses)



An equal number of students indicated they tried new vegetables, or did not try new vegetables, as a result of the program. Some examples of vegetables students tried include: peas, zucchinis, nasturtiums, green beans, and radishes. 85.2% of students indicated they and their families want to garden more as a result for the program. However, only 53.4% compare with 46.2% of students indicated they eat more vegetables now, after the program.

### 4.3 MOVING FORWARD

Students were asked to provide their input on the continuation of the program. They were asked, "Would you like to see the garden program continue? Why or why not?" The response was a resounding yes. Predominately, students say it is fun. Other responses include *"it is nice to be outside after the winter,"* *"because veggies are healthy,"* and *"There's no point stopping it."*

The students were also asked if the garden club should continue. Some honestly replied they are not part of the club therefore do not have an opinion. Many emphasize how its fun, they like being outside, and having more time to care for their gardens. The most poignant response was *"I do, growing helps me."*

#### 4.3.1 SURVEY RESULTS - QUESTION 6

Would you like to see the garden program continue? Why or why not?	
• yeah bc I like garden	• yes. cause we get more time to garden
• yes: because the grade 3s can learn	• so they could be outside more
• yes: cause I love the garden	• yah. so they can experience how to help other people by giving them food
• yes: because that's good for the environment	• Ya
• yes I like plants	• Yes. There's no point stopping it.
• yes: cause kids might have some fun	• Yes. It's kind of fun
• Yes because everybody can learn the same things I learned.	• Yes. Because it's fun.
• yes. Because it a lot of fun and they should have fun too.	• Yes. It was fun
• yes.	• Yes. It's very very very very very very fun.
• yes	• Yes. It's fun
• Yes because its fun!	• I would like to continue to garden
• yes. because people like gardening	• yes because veggies are healthy
• yes. so they can have as much fun as we had	• I do I love it
• It is fun and it is nice to be outside after the winter	•

#### 4.3.2 QUESTION 7: WOULD YOU LIKE TO SEE THE GARDEN CLUB CONTINUE? WHY OR WHY NOT?

Would you like to see the garden club continue? Why or why not?	
• ok	• yes. so everyone can have as much fun as we had this year
• yes	• yes. cause [the] grade 3 and after school will get more time.
• yes: cause it's best thing I have ever done.	• yes because they could have fun
• yes	• yes. cause it makes people happy.
• yes:	• ya. cause it's fun.
• maybe	• Same answer as the one above
• Yes, because everyone can have fun gardening.	• Yes. Same reason.
• yes. So we can take care of our garden.	• I like it because we got hot dogs.
• Sure. I get to go play outside after school and I get to plant.	• No, I'm not in it.
• Yes because anyone can join.	• Yes. I'm not in garden club though.



- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• maybe</li> <li>• I do growing helps me</li> </ul> | <ul style="list-style-type: none"> <li>• I would like to because it is fun and you get to plant and do fun stuff</li> <li>• yes, it is awesome</li> </ul> |
|--|---|

## 4.1 CONCLUSION

The student evaluation is very supportive of the *Growing Together at Weledeh* program, as is highlighted by the survey responses. It illustrates how the goals are being achieved and which specific aspects of the program resonate most with students. Interestingly, some tasks, such as weeding, can be disliked by some students and a favourite thing for others. The final question asked students to list their favourite part of the program. Planting and watering plants appeal to many students. Some also enjoyed “see[ing] the plants grow,” “being with friends,” and “working together.”

### 4.1.1 QUESTION 8: WHAT IS YOUR FAVOURITE PART OF THE GROWING TOGETHER AT WELEDEH PROGRAM?

What is your favourite part of the Growing Together at Weledeh program?	
• Putting watering the plants	• we get to grow and harvest
• planting and water	• that you get to take home the food you planted.
• Painting, eating the food.	• growing the food and plants
• you get to water stuff	• my favourite part when we plant and work together
• watering the plants and picking out the weeds	• planting
• you can plant food and vegetables	• I can't answer without knowing if I like it or dislike it.
• planting and having fun.	• Working with my own garden people.
• I like the part where we plant.	• working together.
• planting	• we planted.
• Learning	• I got to paint with Ms. Caihla
• PLANTING!	•
• see the plants grow	• planting the plants and watering
• Being with friends	• everything there
• you grow flowers	•



## 5 BEYOND WELEDEH

After successfully establishing the program at Weledeh Catholic School, Ecology North partnered to establish a garden program at Mildred Hall School, developed a garden curriculum to serve as a guide for other schools throughout the Northwest Territories (NWT), and branched out to work with new schools in the community. This program has been at the heart of a renewed enthusiasm for local food production learning opportunities to be available in classrooms. Ecology North is working on expanding the program, to schools across Yellowknife, and throughout the NWT.

## 6 NEW PROGRAM TAKES ROOT: MILDRED HALL INTERGENERATIONAL GARDEN

### 6.1 THE PROGRAM

The Mildred Hall Intergenerational Garden brings together residents from Northern United Place and students from Mildred Hall School to garden in plots located on the school grounds. Residents from Northern United Place are low income and many are seniors or disabled. The garden provides them with the opportunity to grow and harvest their own vegetables, and access green space close to home. Mildred Hall students also benefit from the additional greenery on the school playground, thanks to the

garden. More importantly, they benefit from the learning opportunities associated with growing a garden. Many Mildred Hall students live in rental housing, apartments or houses without gardens. The goal of the Mildred Hall Intergeneration Garden is to allow NUP residents and MHS students the opportunity to plant, care for and harvest their own vegetables in their own garden plots. The Mildred Hall Intergenerational Garden provides both young and old the chance to experience the wonders of growing food!

## 6.2 THE PARTNERS

The Mildred Hall Intergenerational Garden was created based on a partnership between the Yellowknife United Church, Mildred Hall School, YK1 school board, and Ecology North.

### 6.2.1 YELLOWKNIFE UNITED CHURCH

The Yellowknife United Church is represented by their Outreach Committee, whose mandate it is to reach out and serve the needs of the community. Their dedicated volunteers were instrumental in getting the funding, supplies and labour organized to build the garden. They continue to play a key role troubleshooting logistical challenges, organizing the community members with garden plots, and providing garden mentorship.

### 6.2.2 MILDRED HALL SCHOOL

Mildred Hall School (MHS) is a key partner in the program. The garden is located on school grounds. Students and teachers participate in soil preparation, planting and harvesting activities. Generally, there is one teacher responsible for the program, and their class spends the most time in the garden. However, some years the school decided to make an event of planting and send multiple classes to join the fun all at the same time! Staff and students ensure their peers respect the garden.

### 6.2.3 YK1 SCHOOL BOARD

YK1 School Board was very active in the planning process. Their building is located directly beside the school and gardens. They contribute support through the time of groundskeepers/maintenance workers, and access to water. Water access is important for the garden.

### 6.2.4 ECOLOGY NORTH

Ecology North's role is focused on the educational programming. Ecology North provides on-going mentorship to teachers, and a number of sessions with the class. Main themes include soil fertility, soil preparation, planting, germination, and nutrients.



### 6.3 HOW IT STARTED

The idea of the garden grew from the interaction between NUP residents, and youth who were watering the garden boxes for the building. The Yellowknife United Church Outreach committee volunteers worked tirelessly to secure funding for the construction of the Mildred Hall Intergenerational Garden. All the partners coordinated to work through the necessary logistics to build and develop a school-community garden. Ecology North's main role is guiding the learning and facilitating sessions with teachers and students, albeit the partners have a very collaborative approach to program development.

### 6.4 THE VISION FOR THE GROWING SEASON

The Mildred Hall Intergenerational Garden is heading into its third growing season. Teachers and students are eager to start growing seedlings. Plans are shaping up for the spring. Although, the lead teacher will be absent this year, she has passed the torch to an enthusiastic co-worker.

### 6.5 OFF SHOOTS

Further to the garden program, MHS identified a need for additional greening of their playground. Ecology North was able to access support from Tree Canada to plant a berry grove with berry bushes (36) and trees (28) with students and staff from MHS. The project with Tree Canada is an example of an offshoot from the garden program.

## 7 THE GARDEN CURRICULUM

Ecology North developed a garden curriculum to guide teachers and schools throughout the NWT. Transportation costs throughout the north are very high. Although, Ecology North would be keen to help school throughout the territory set up garden programs, it is simply not feasible. Teacher turnover is another factor experienced to a greater and lesser extent throughout the territory. As a response to this reality, Ecology North developed a garden curriculum. The vision is for the garden curriculum to serve teachers with an interest in providing their students with experiential learning opportunities, and help inform and provide structure and resources for their passions. It lays out different options for setting up school programs, different activities and lesson plans, as well as additional resources pertinent to northern growing. Ecology North staff will be available to help set up these programs in communities around the NWT. The garden curriculum is a tool to help local food production blossom and grow in the future.

## 8 PLANTING THE SEED: NEW PROGRAMS

### 8.1 WILLIAM MACDONALD SCHOOL

Building on the momentum at other schools, ten raised beds were built and seeded through efforts from the school parent advisory council (PAC), Ecology North and the Government of the Northwest Territories, Industry Tourism and Invest department (ITI) at William MacDonald School. The garden was built and planted in late June 2016. YK1 school board summer students watered throughout the rest of the growing season. The timing of construction and planting was too late for a class program. Yet in the fall of 2016, a grade 6 class was able to harvest the garden. The teacher engaged the class through a student led inquiry process. The harvested food was used for a school feast. Additionally, the grade 6 class developed a short video, and presented it at an ITI Agriculture conference. The harvest activity planted the seeds of interest within the school, and now they are growing as we near the 2017 garden season.

The vision for 2017 includes continued student involvement in planting of the beds this year, and tie in with the garden curriculum. Ecology North also pursued and was able to secure Tree Canada funding to plant a berry grove and trees on the William McDonald School property that will add with the experiential learning opportunities and improve the school grounds for the kids.

### 8.2 RANGE LAKE NORTH SCHOOL

A brand new seed is being sown at Range Lake North School. Ecology North was invited to participate in preliminary discussions around building a program. There is enthusiasm, knowledge, and motivation, which are the key ingredients in the first step of garden building. We look forward to supporting, helping, and assisting Range Lake North School as their vision for a garden program germinates this spring.



### 8.3 HOPE'S HAVEN

Hope's Haven is a home for youth experiencing homelessness, which offers a transitional housing program and multiple support services. In 2016, Ecology North coordinated the construction of raised beds in front of their building, and the planting and harvesting of vegetables. The plans for this year are yet to be determined, but Ecology North is ready to provide support if desired to the residents and staff at Hope's Haven. Solutions to homelessness and food insecurity can grow together.

### 8.4 GARDEN CURRICULUM OUTREACH:

Ecology North will be promoting its garden curriculum this spring in the hopes that additional schools will develop a Weledeh style program. We can offer some staffing support to help interested schools and teachers. Hopefully the garden curriculum combined with staff support can successfully help build garden programs in several schools in smaller NWT communities over each of the next few years.







## 9 CONCLUSION

Ecology North is proud to celebrate the success of the *Growing Together at Weledeh* program. Building on the case study, the student evaluation gave us a first hand account of why students enjoy the program, what they enjoy the most, and how it impacts their interest, knowledge and skills related growing as well as their eating vegetables. *Growing Together at Weledeh* is the root of Ecology North's local food growing programs. However, a tree is growing. The Mildred Hall Intergenerational Garden is shooting up, and is set for a third successful gardening season. William McDonald School will be in a growth phase in their second year with the program. Range Lake School is just germinating into a full-blown program. Plus, our garden curriculum is adding foliage to our cornucopia. Two berry bush and tree planting programs are a great chance to branch out. Ecology North is inspired and feels that the *Growing Together at Weledeh* has been a tremendously valuable root program that is helping build a future where all NWT students have access to healthy foods and the knowledge to grow it. Together, we can harvest all we need!