AGRICULTURE: A WAY FOR STUDENTS TO "LIVE THEIR LEARNING"

Presentation of Findings

"School is Such a Chore!
Agriculture as a Lens for Enhancing Learning and Life Skills"

May 15, 2026

Funded by Alberta Education Research Partnerships Program

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NEW HUMBLE COMMUNITY SCHOOL ASSOCIATION



The Researcher



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The Research Journey…



- January, 2022: First meeting at NHCS
- April 22, 2022: **Growing Together** Community Dinner
- December, 2022: Grant Application to Alberta Education **Research Partnerships Program (RPP)**
- February-April, 2023: **Pilot Study**: "*Triscuit & Pepper Go to School: Elementary School Students' Learning With and From Animals*"
- March 2, 2023: Research Partnerships Program Application **Success**!
- February 26, 2026: A Shared Harvest Research Celebration

Research Questions:

- How does experiential learning through agriculture foster curricular connections and life skills in K-6 students?
- How does an agricultural learning environment shape students' relationship with school?

Qualitative Research Design

"Tell stories. Look for the glitter."

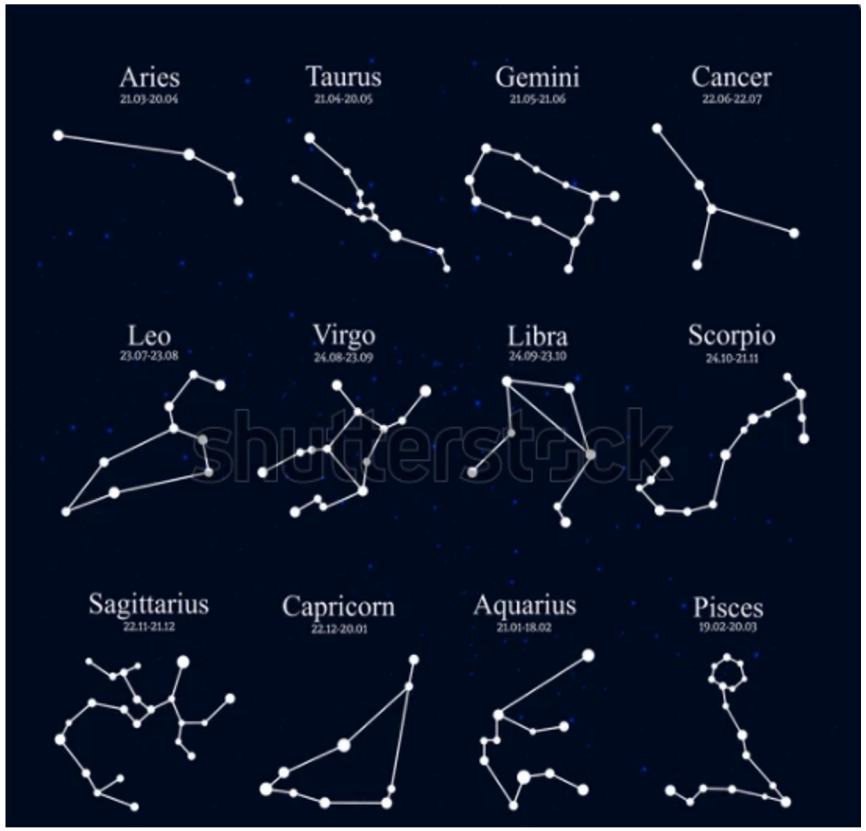
(Robert Macfarlane, CBC Ideas, October 25, 2023, 52:30)

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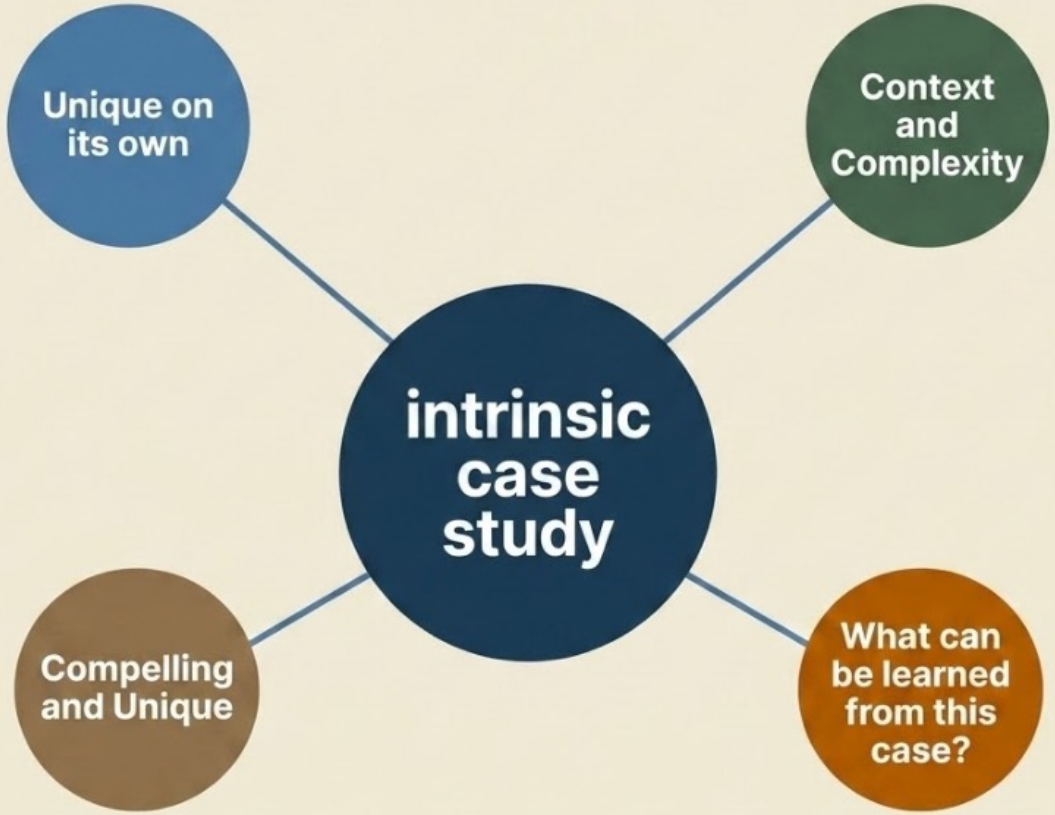


https://pixabay.com/images/search/star/





Data → Data Interpretation


Unique on its own
Context and Complexity
intrinsic case study
Compelling and Unique
What can be learned from this case?

Data Collection & Sources:

- **April 2023 – June 2025**
- **Individual interviews**
  - K-6 students (n=52)
  - Grade 7 alumni (n=2)
  - Teachers and staff (n= 8)
  - Parents (n=12)
  - Community members (n=5)
- **Teacher focus groups (n=2)**
- **Web-based parent survey (n=29)**
- **Observations of learning (<40 visits)**

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Your Data Collection: “Evidence Capture”

What are the moments when students demonstrate they have grasped a concept?

When do you know students can appropriately apply a skill/concept?

When you think about large-scale projects, what outcomes across curricula are achieved?

Conceptual Framework



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Place-based education framework

(Granit-Dgani, 2021, as cited in Yemeni et al., 2025)

- **Learning IN place** e.g. barnyard, Wizard Lake, ice rink
- **Learning OF place** e.g. gardening, raising livestock, bird feeders, burying cotton underpants
- **Learning FROM place** e.g. pond dipping, barnyard, guest teachers (vet)
- **Learning FOR THE SAKE OF place** e.g. composting, worms, raising animals, gardening
- **Learning that VALIDATES place** e.g. Raise ‘em Rural, agriculture ☺

Community-based research principles:

- Research has practical relevance to those studied
- Researchers include community in data collection
- Share findings in accessible ways for the groups that matter
- Research is a collaborative process that puts community at center and expands impact

The Humble Researchers




I believe in this school.
amazing work you are accomplishing.
It's ok to ask for help.
I'm making a difference.
What I'm doing matters.
Everyone believes in me.

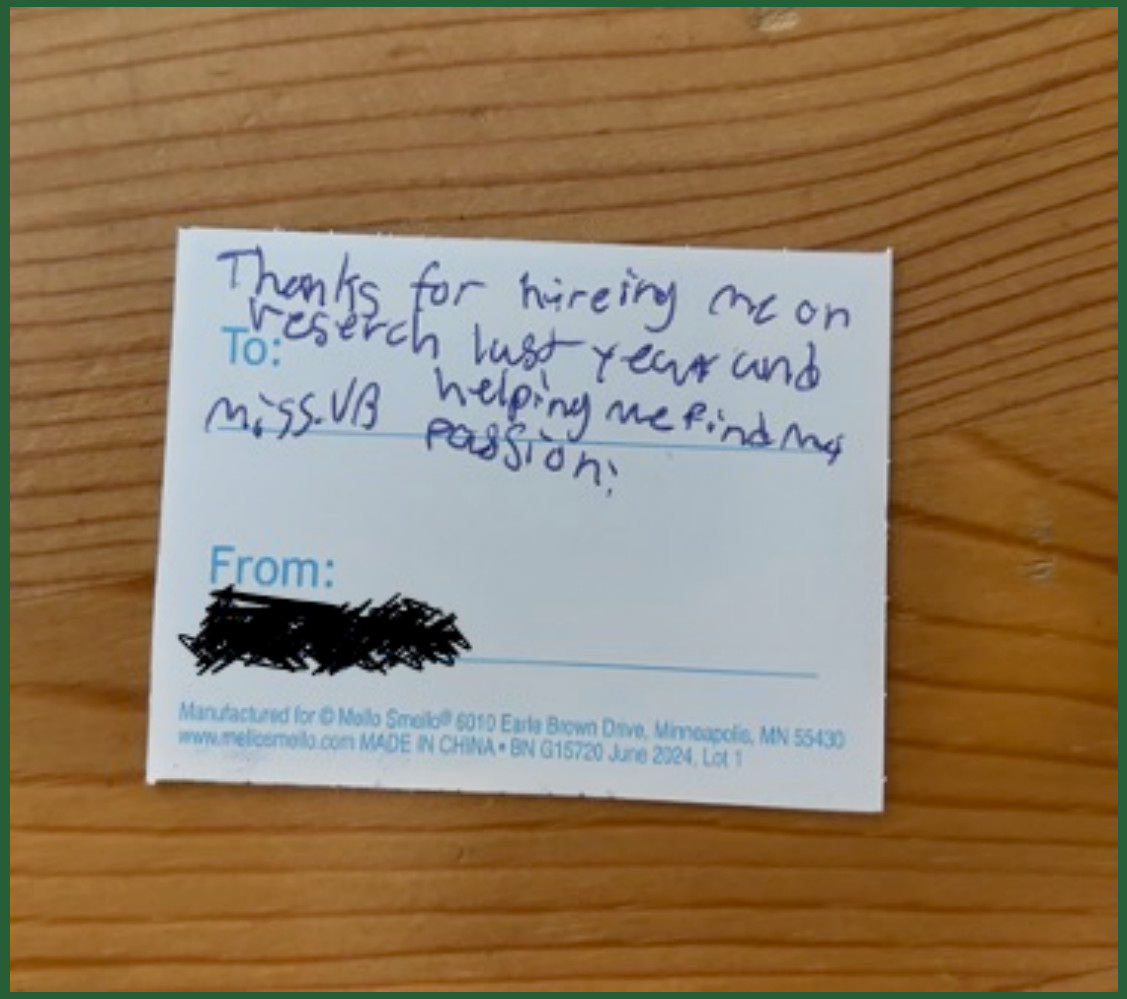



Filming Techniques
1. Introduction to camera angles, shots, and movements
2. Shooting for the edit
3. Understanding visual storytelling and composition
TECH




0:22

“I feel like I have a purpose…it feels good to be part of something.” (Grade 6)



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C2U Expo: MacEwan University, May, 2025





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PAUL BYRNE HALL
IN THE HEART OF THE ROBBINS

The Qualitative Report

Volume 31 | Number 2 Article 5

2-15-2026

Research as a Reciprocal Act: How Rural Grade 5 and 6 Co-Researchers Transformed Their Adult Research Mentors

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The New Humble Difference

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1 in 3 Edmonton public-school students chronically absent from class, data shows

Number of students missing at least 10% of school year rising since pandemic

School absenteeism is growing across Canada and skyrocketing in these Quebec districts

Community organizations step in after kids miss months — even years — of school

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The impact of 'social malnutrition' on students' mental health and how to address it

Research being done to understand lack of socialization during pandemic

Risky play for children: Why we should let kids go outside and then get out of the way



It turns out play with an element of risk may be exactly what today's kids are missing

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Violence against teachers by students is turning into a bona fide workplace hazard

According to one survey, 60 per cent of teachers have personally experienced violence on the job

Kids are getting ruder, teachers say. And new research backs that up

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SAIT offers summer camp that teaches teens how to grow up

Adulting camp includes financial literacy, job finding skills and first aid

Financial literacy for kids

September 17, 2015 | News | 0:01

Hamilton entrepreneur Theresa Cascioli explains why kids need to learn how to manage money at an early age.

'Adulting 101' programs help Gen Z catch up on key life skills

Psychologist says Gen Z children grew up with fewer opportunities to learn practical skills

“Around the world, evidence shows that whether children get ahead or fall behind depends in part on the cultures created in schools and classrooms.”

(Grant, 2023, p. 158)

Vision

NHCS students will use the lens of agriculture, stewardship and experiential learning to develop the skills, resilience, and values to be accountable and contributing citizens of local and global communities.

The Five Themes of Agricultural Literacy

Agriculture and the Environment



Plants and Animals for Food, Fibre and Energy



Food, Health, and Lifestyle



Science, Technology, Engineering and Mathematics



Culture, Society, Economy and Geography



Spielmaker, D. M., & Leising, J. G. (2013). National agricultural literacy outcomes. Logan, UT: Utah State University, School of Applied Sciences & Technology. https://www.agliteracy.org/resources/outcomes/

Mutually Supporting Pillars



Agricultural Literacy

Understanding global food systems, plant science, and modern farming techniques.



Land Stewardship

Sustainable practices to protect ecosystems, water resources, and soil health for future generations.

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Experiential Learning

Active participation in hands-on activities, projects, and skill-building in a real-world setting.



Charter Goals

1. Agricultural literacy
2. Problem-solving, adaptability, resilience, and critical thinking
3. Understand the value of goals and outcomes
4. Academic success and leadership

Ministerial Order on Student Learning

1. Communication
2. Critical thinking and knowledge development
3. Health for life and character development
4. Preparing for the future
5. Community and civic engagement
6. Understanding their place in the local, national, and international world.

The Farm:
High Performance Lab for the Modern World

Farm Activity	Charter	Modern World
Calculating feed rations	Ag literacy, experiential learning	Data analytics: managing inputs/outputs for efficiency
Animal/plant health	Ag literacy, , experiential learning, stewardship	Diagnostics: observing subtle cues to identity a problem
Structural planning & maintenance	Ag literacy, experiential learning, stewardship	Engineering, physics
Gardening	Ag literacy, experiential learning, stewardship	Project management: planning inputs/outputs, sequencing tasks, timing planting/harvest, resource allocation, health



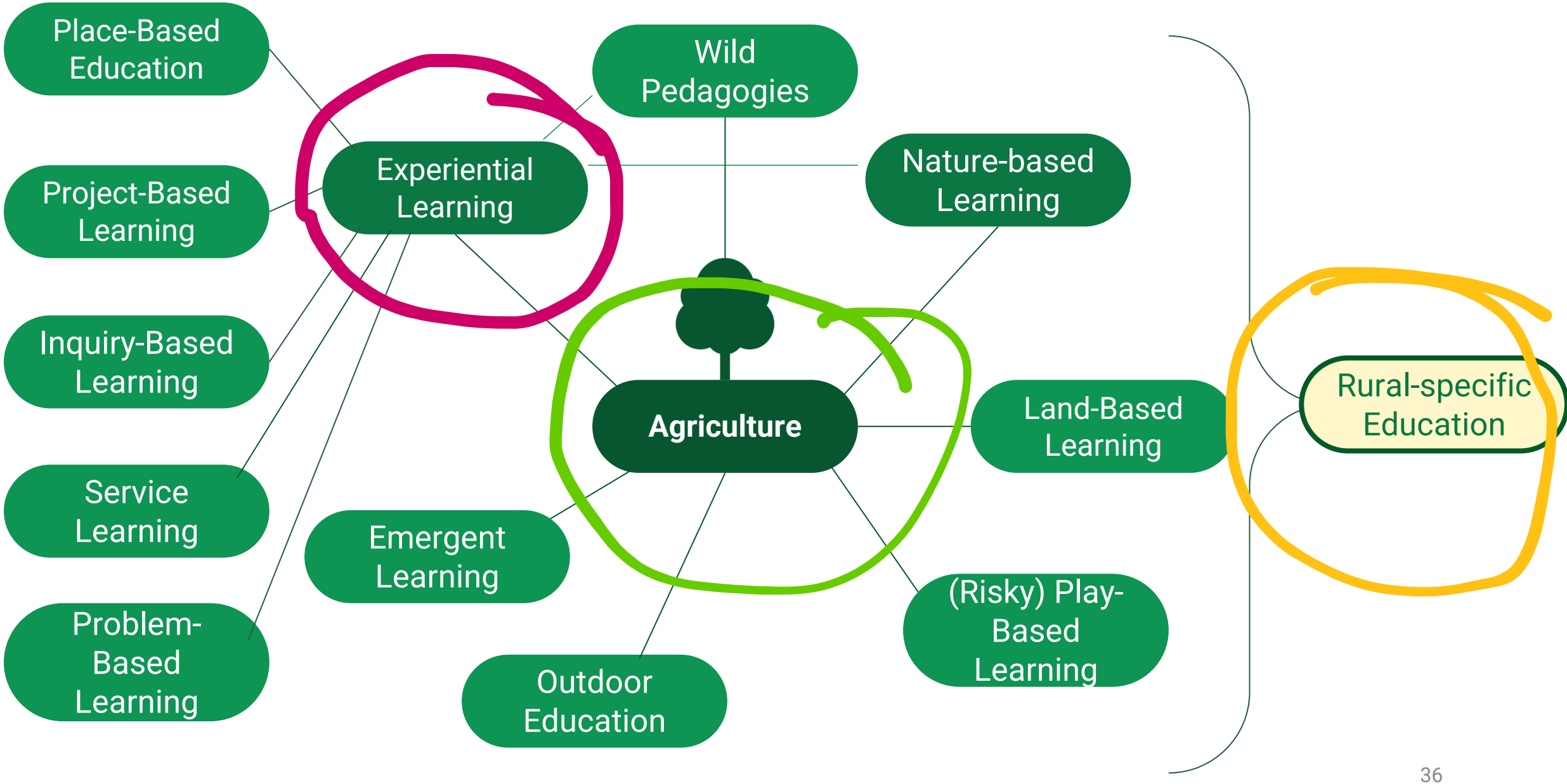
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“I would say I am lucky [to have agriculture in school], but I wouldn’t, like, say it to brag.” (Grade 5)



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What is special about agriculture?



Research Claims



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- ✓ **Agriculture makes learning purposeful and imperative**
- ✓ **Students learn and develop through high-stakes, adult-like responsibilities**
- ✓ **Agriculture makes learning joy-full, wonder-full, and awe-full**
- ✓ **Agriculture develops citizenship and stewardship**



Agriculture Makes Learning Purposeful and Imperative

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“If you leave the emotion out of science, it’s like throwing a dinner party and serving pictures of food.”

(Louv, 2020, p. 88)

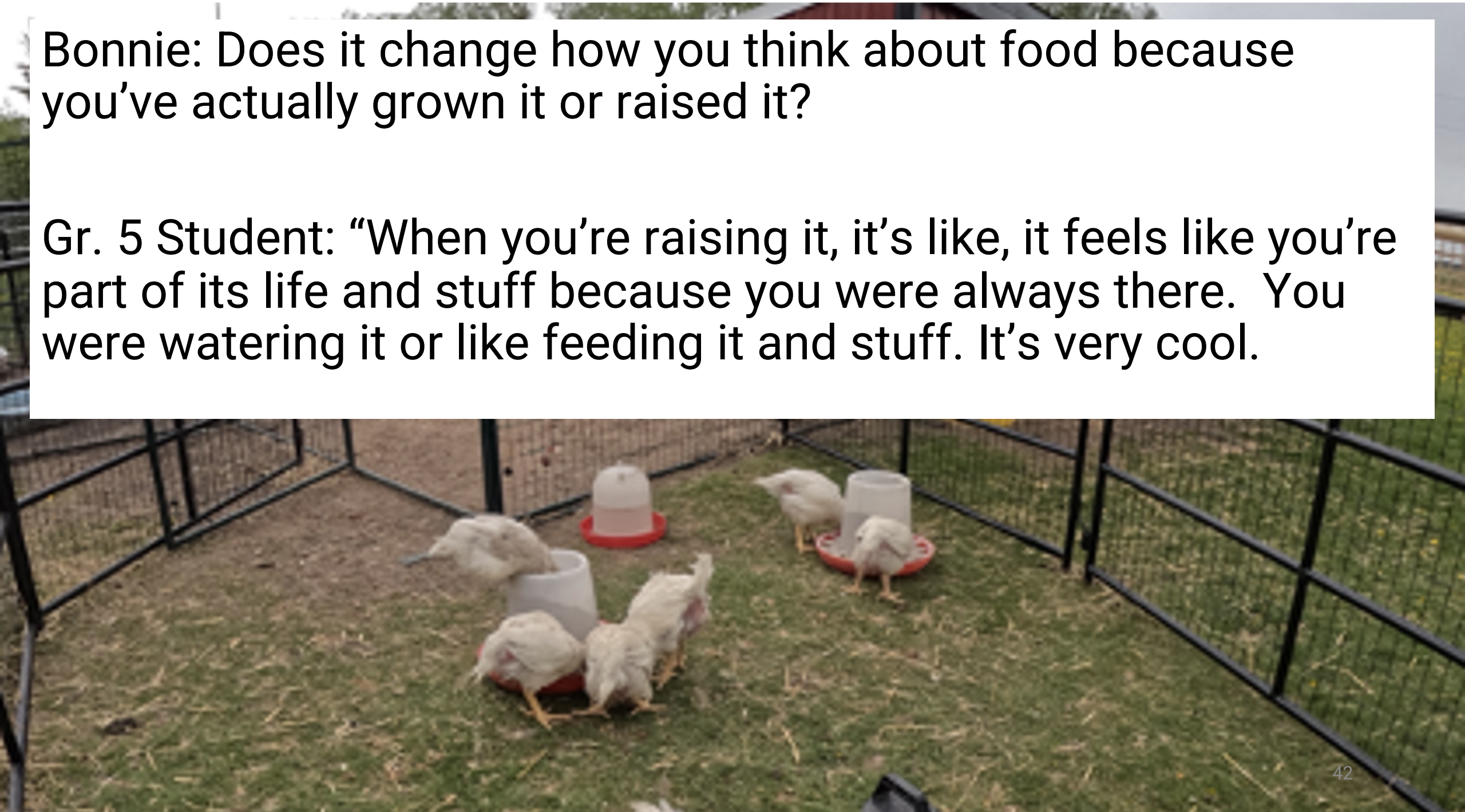


“You’re holding an animal’s life in your hands with all the decisions you’re making.” (Parent)

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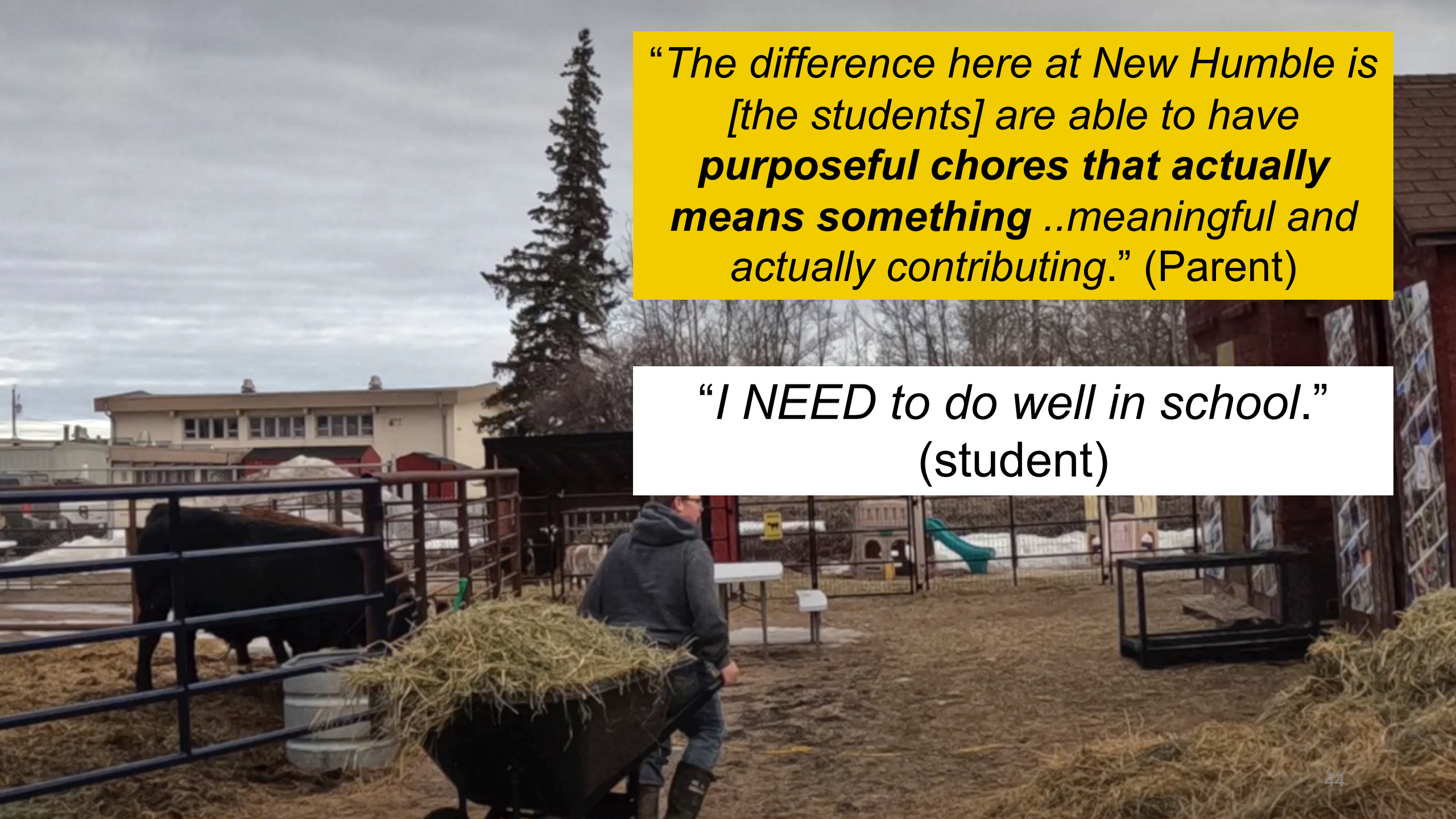
Bonnie: Does it change how you think about food because you've actually grown it or raised it?

Gr. 5 Student: "When you're raising it, it's like, it feels like you're part of its life and stuff because you were always there. You were watering it or like feeding it and stuff. It's very cool.



“[Child] used to say, ‘I want to farm. I don’t need to go to school.’ Now, it’s ‘I want to farm and I **HAVE** to go to school.” (Parent)



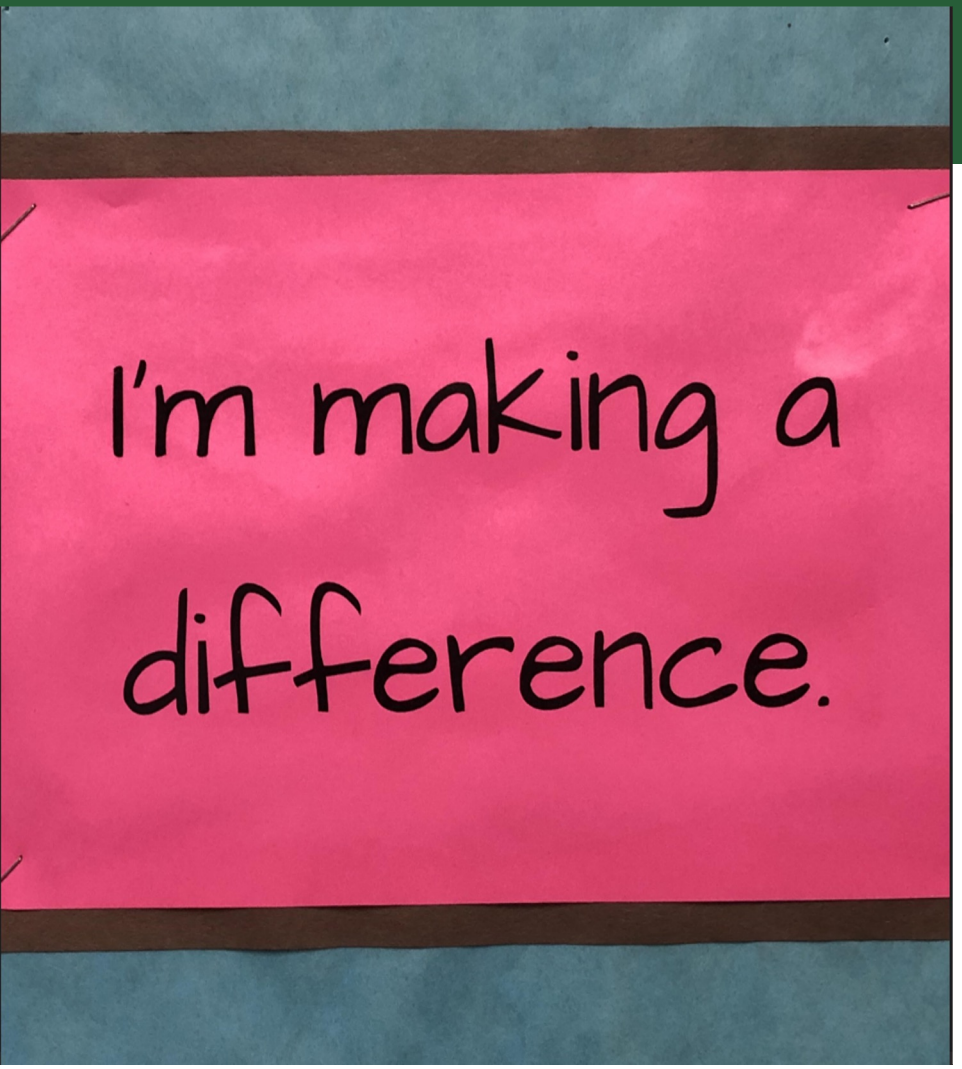


"*The difference here at New Humble is [the students] are able to have* ***purposeful chores that actually means something*** *..meaningful and actually contributing*." (Parent)

"*I NEED to do well in school*." (student)

“They’re looking for jobs. They’re looking to try to be an important part of our school society. They’re gonna be those doers and those people that are making a difference somewhere else, because we’re making a difference here, and they see it.”

(Educator)



"I'm doing something important."
(Grade 5)



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“Everyone has a story.”

“Is that like a
quarter section of land?”

“If this school wasn’t here, I don’t know what I would do.” (Grade 6)



"When there's a vision that people relate to, that aligns with their values, supports, and **validates the community beyond the school**, then they are willing to support it."
(Community member)



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Students Learn and Develop through High-stakes, Adult-like Responsibilities

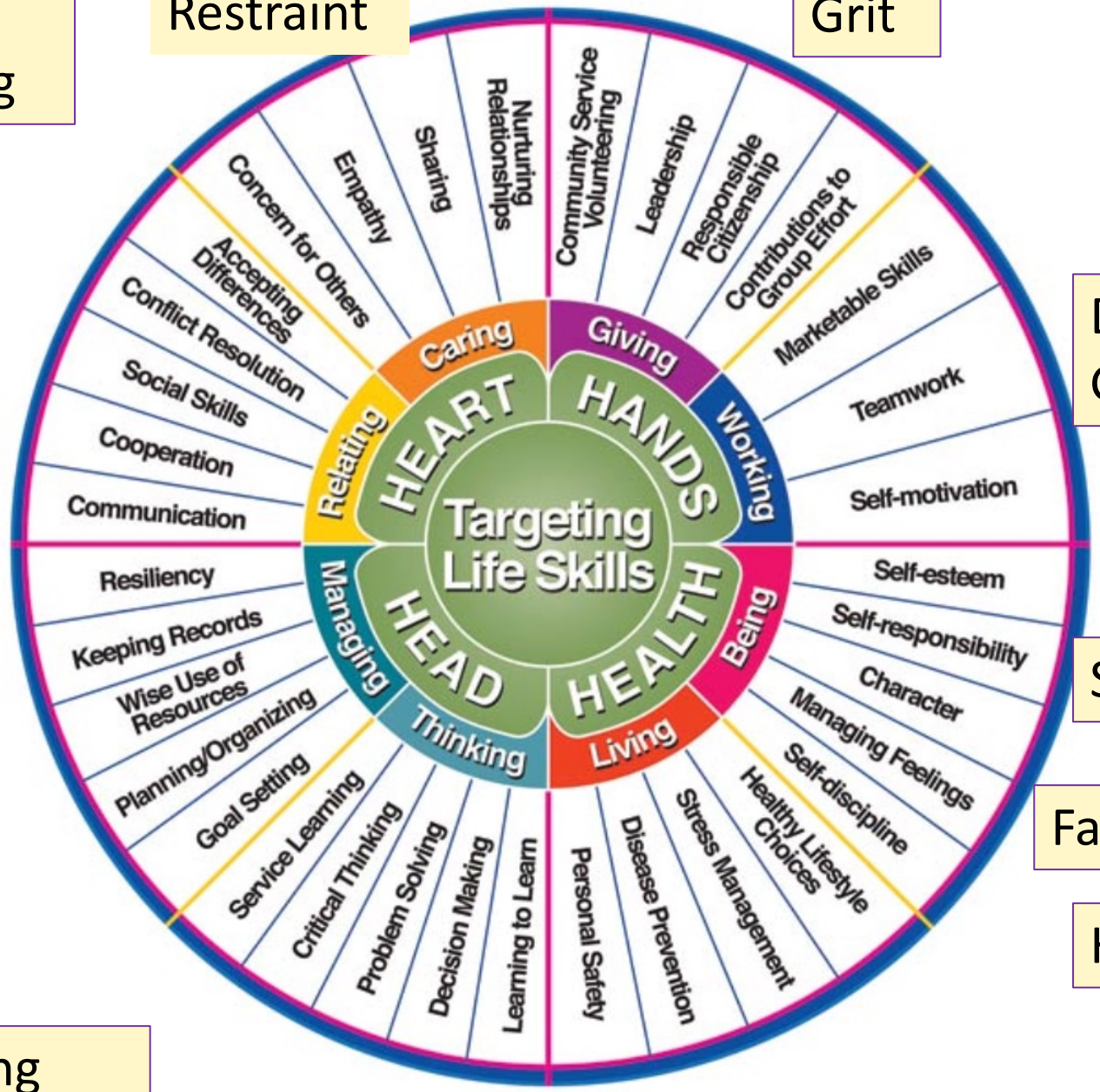
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Intergenerational Teaching & Learning

Restraint

Grit

https://extension.purdue.edu/4-H/about/impact-targeting-life-skills.html



Delayed Gratification

Comfort with Uncertainty

Persistence

Sacrifice

The discipline of hope

Failing Fast & Forward

Help seeking behaviour

Integrative Thinking

Dealing with Change

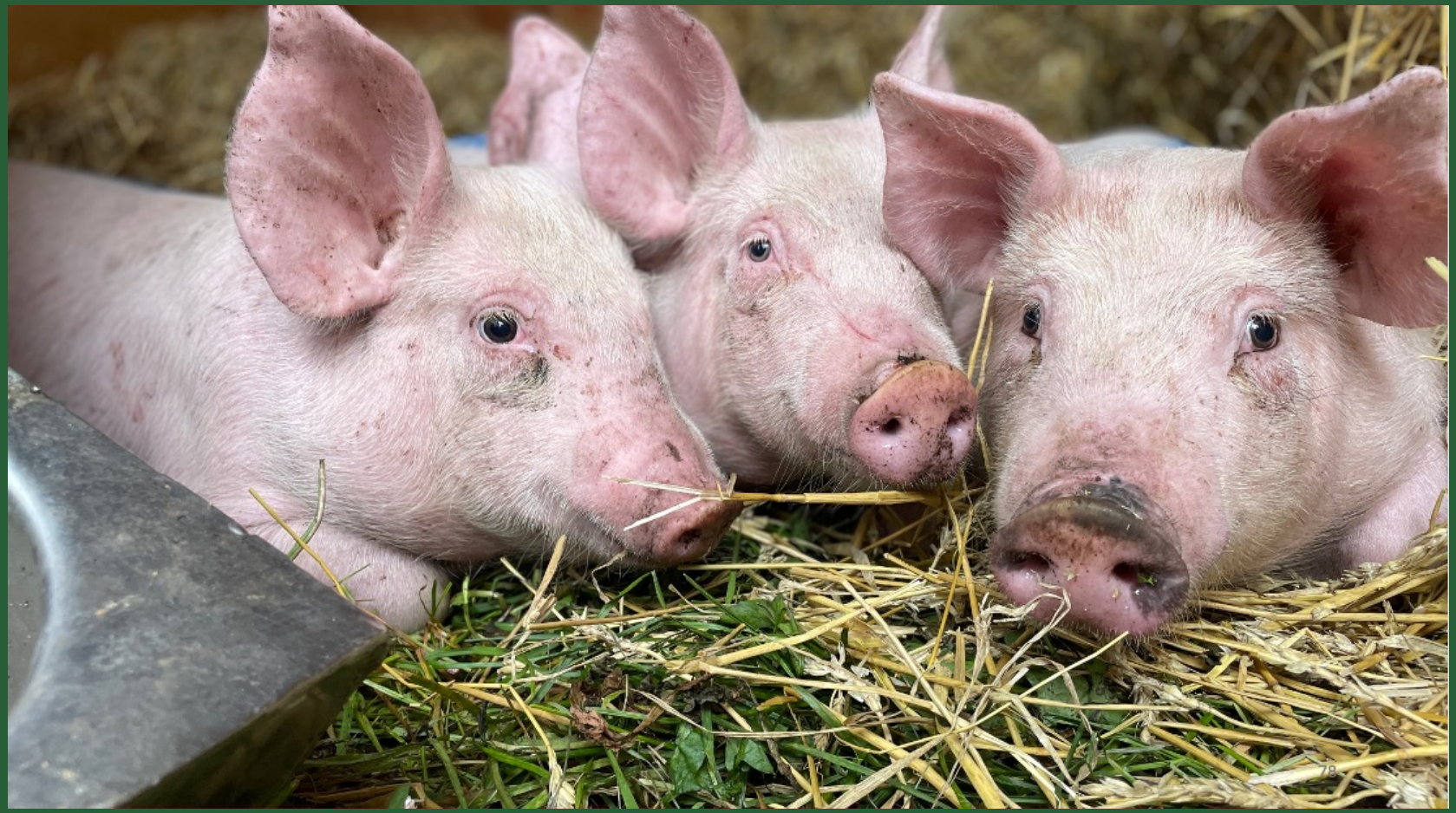
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Conceptual Specificity

“If you don’t know what a tree is, you learn about it, and it’s kind of worth it because you did it, and now you know. And your friend doesn’t know, and she’s like, ‘what tree is this?’ And you can be, like, it’s a **spruce** tree.” (Grade 2)

Prolapse….herpetologist…whorl…gestation….photosynthesis…fodder… canola, barley, heifer, cow ….

“With the barnyard, it doesn’t stop when it’s not cute anymore.” (Parent)



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“It’s the one industry where you learn commitment” (Community member)



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The Chores

"They're all dying to get a job." (Teacher)

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“It was scary (job interview). I was like, I really, really, really, really want the job, but I would be happy whoever got it anyway. And I was so happy when I got the job!” (Grade 5)

“If you go for a job interview and you don’t get it, it’s like a learning lesson because when you do interviews, you’re not always going to get it.” (Grade 6)

“I don’t tell my kids when it’s time to go for chores. They watch the clock. They know. They leave. They come back. **They’ve got it**.”

(Educator)



“Essentially it’s their farm.” (Educator)

“You’re almost forced to figure things out.” (Community member)

“If there’s any problems in the barnyard, we have to solve them.” (Grade 6)

“We had to make sure there’s sunlight but it was shading at one time, and then we problem fixed it.” (Grade 3)

“What do you think you’re learning from doing chores?”

“Being able to **do things without complaining** because…we have to be on track, and **no funny business** when you’re doing chores or else we can get fired.” (Grade 6)

”It really makes you **appreciate farming more because of how much work they put into that**…lots of the city kids don’t even really think about where their food comes from…in every way, every single piece of food is from a farm.” (Grade 6)

“There is a direct consequence to your actions…when you’re dealing with living things.” (Parent)



Leah: I was wondering, do you have any idea why lack of calcium would cause a prolapse?

Grade 5 student: Maybe because the calcium might be holding up all the parts inside, and then maybe when they just start lacking, it like, just falls out.

Learning With/From Animals





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“There’s livestock and there’s deadstock.”

(Grade 6)

“You just gotta go on. Everything dies.”

(Grade 5)

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Why is it important to learn about agriculture?

"You have to make crops so you can have food." (Kindergarten)

"You get smarter at learning, like, how to grow your own food." (Grade 1)



“We learn who we are in practice, not theory”

(Epstein, 2019, p. 161).



“I’m one of the leaders to look up to.”
(Grade 6)

“I have a gift.”
(Grade 6)

“[Child] always looked for the hazards in things…willing to take risks with doing stuff outside.” (Parent)

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Community, Cooperation, Collaboration

"What really makes a difference is whether people recognize that they need one another to **succeed on an important mission**. That's what enables them to bond around a **common identity** and stick together to **achieve their collective goals**." (Grant, 2023, p. 182)





Learning is…
Joy-full
Wonder-full
Awe-full

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Awe is key for motivating personal improvement, and engagement in learning. (Keltner & Haidt, 2003).

“Wonder is not an educational frill but lies at the heart of learning.” (Egan et al., 2013, p. viii)

Loving Learning, Loving *Thinking*

"If I'm doing a project, I'm **thinking**, building, and writing, and having fun building and experiencing how this thing works, and **asking questions** on how to figure out how it works more."

(Grade 6)



In Triscuit & Pepper's pen with Kindergartener…

"Look at his head! [points to Triscuit's horns]

What are these things? What are these hard things up here?

Are they still growing?"

“My children come home happy.” (Parent)



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“There’s one student in my class – they’ll be doing independent work, and I’ll just see her look behind and smile at me, and I’m like, ‘What are you doing?’ She’s like, “I’m just happy.”

(Educator)

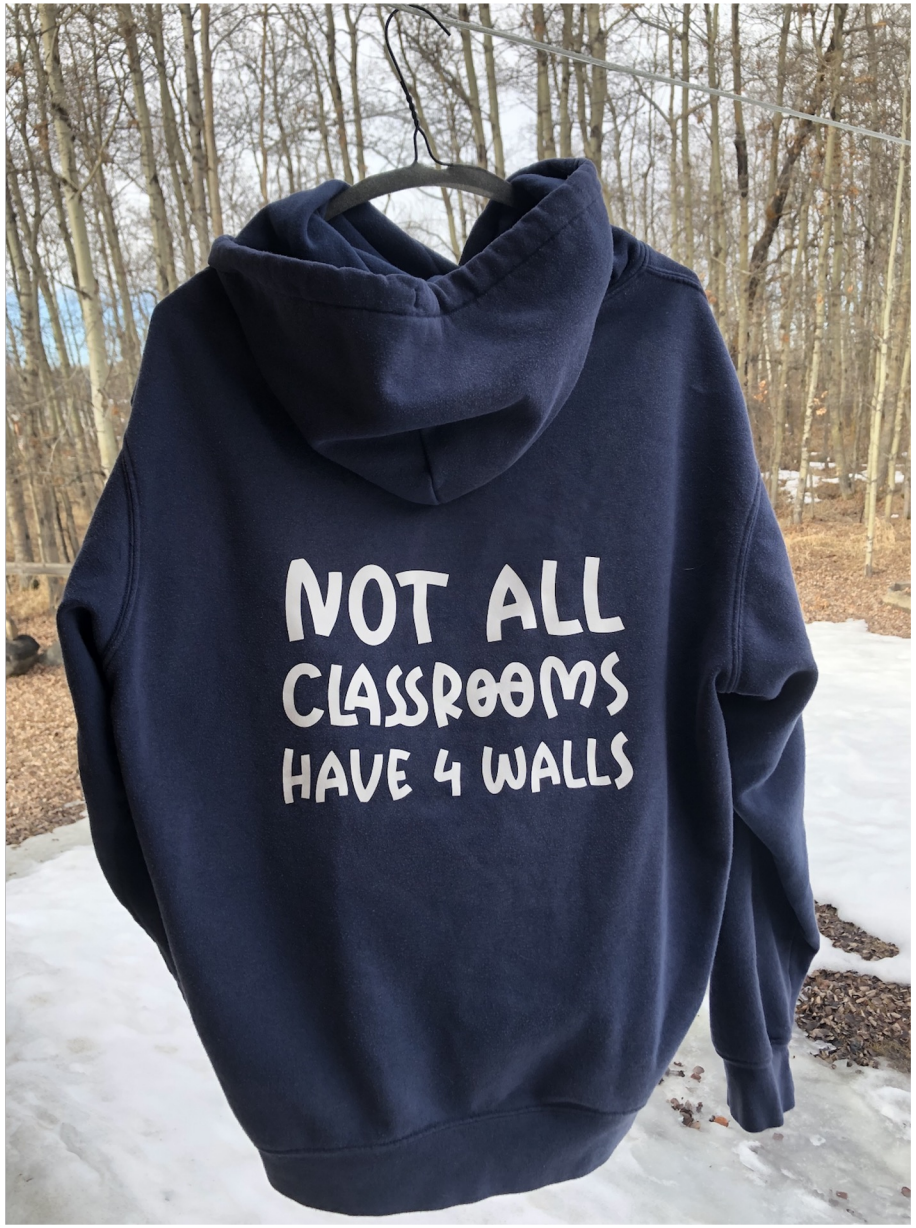


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“Some animals actually like me in the barnyard.” (Grade 3)

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"That's what I got to do today, I got to take the kids for a walk….We're out on a little hike, out and back, and then you're hearing things like, ***'This is the best day of my life!'"*** (Educator)



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ERICKSON







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"They just seem to understand people have to work to pick this. They've seen it grow…The **happiness** from pulling a carrot from the ground, washing it off with the hose and eating it…**the joy, the thrill, the sass in their voice**… So much pride. It's a beautiful thing."

(Parent)

”You can sneak in the learning.” (Parent)



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Diggin’ into learning… literally!



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“Soft fascination” (Easter, 2021)

Bonnie: Why do you like learning outside better?

Grade 2 Student: “Because it’s more fresh air and you get to see animals that you don’t really see often, and you get to hear **the wonders of nature**.”



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Agriculture Develops Citizenship & Stewardship

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“We’re raising these kids to be **awesome humans**.”

(Educator)

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Intergenerational teamwork…

“It was fun to work together to harvest it, and it was fun to work together to get everything out of the garden, to help the Grade 5s and 6s to get it out of the garden.” (Grade 3)

“Getting the job done. Helping people and [if] they’re like, stuck on something, can’t do it. It’s important to be able to help people.” (Grade 3)

“I like holding worms because it makes me respect nature.” (Grade 3)



“When you have to care for animals and you have to care for the land, you have to think outside yourself.”

(Parent)

“It’s not just going to school…you’re looking out for more than just you.”

(Educator)

“Nature becomes real only when you move from the head to the heart.”

(Louv, 2019, p. 250)

“If I can’t focus, sometimes I take a couple of minutes and just go sit with the animals.” (Grade 6)







It starts with a seed...



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"We want everyone to be part of our story and our journey, and we can't do it by ourselves….We just want you to come and see and feel the difference….We will tell anyone to come to our school. Come. See it. Come **feel** it."

(Educator)

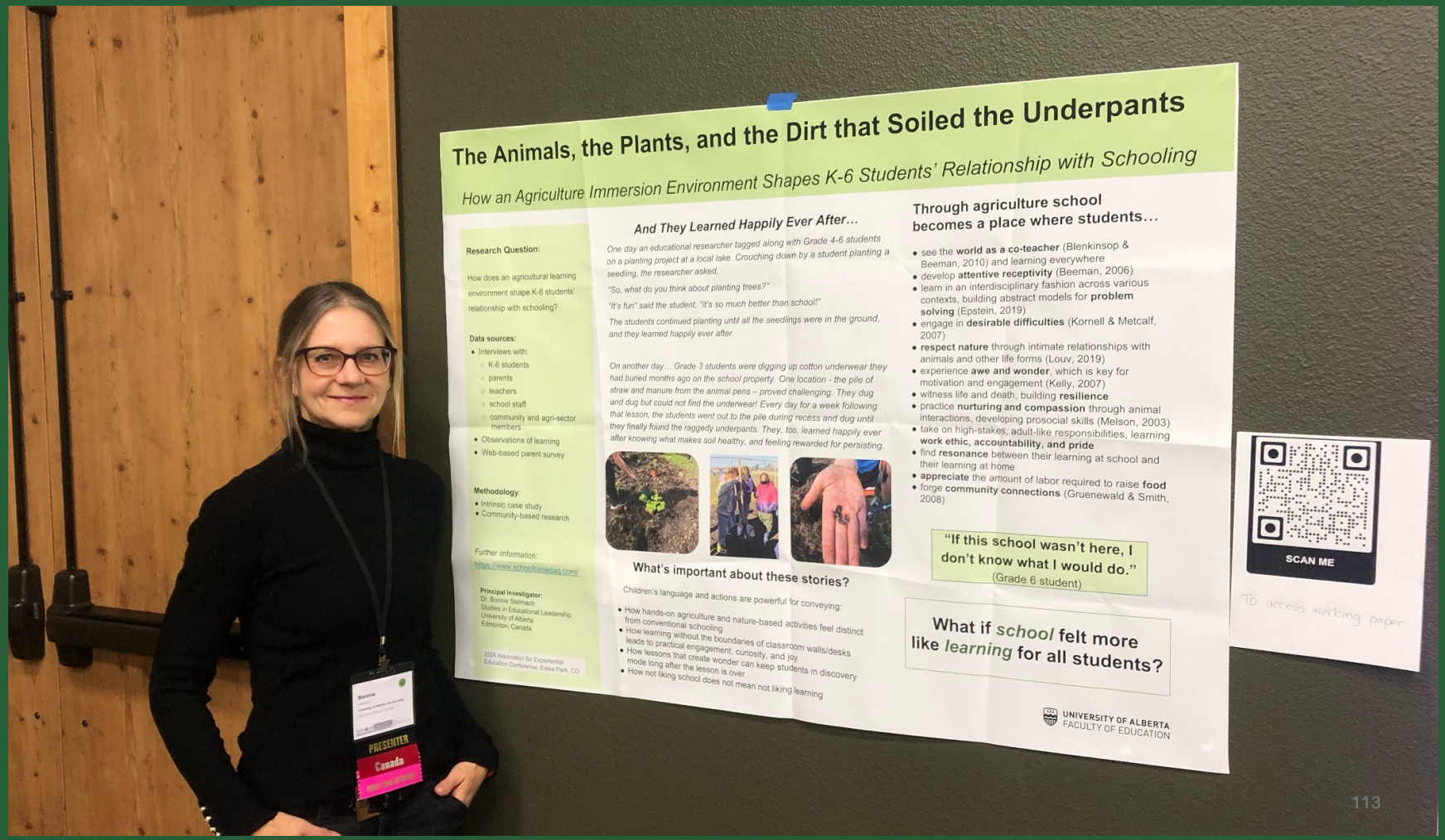
Community-based research principles:

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Knowledge Mobilization

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Association of Experiential Education November 2024



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NHCS PD at UofA Farm December 2024



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Endless Skies Teachers' Convention February 2025



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College of Alberta School Superintendents March 2025

Visionary Leadership:
Insights from a Rural Public Charter School

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C2U Expo: MacEwan University, May, 2025





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Beyond Four Walls Conference/EDU 595 Integrating Agriculture Graduate Course August 2026



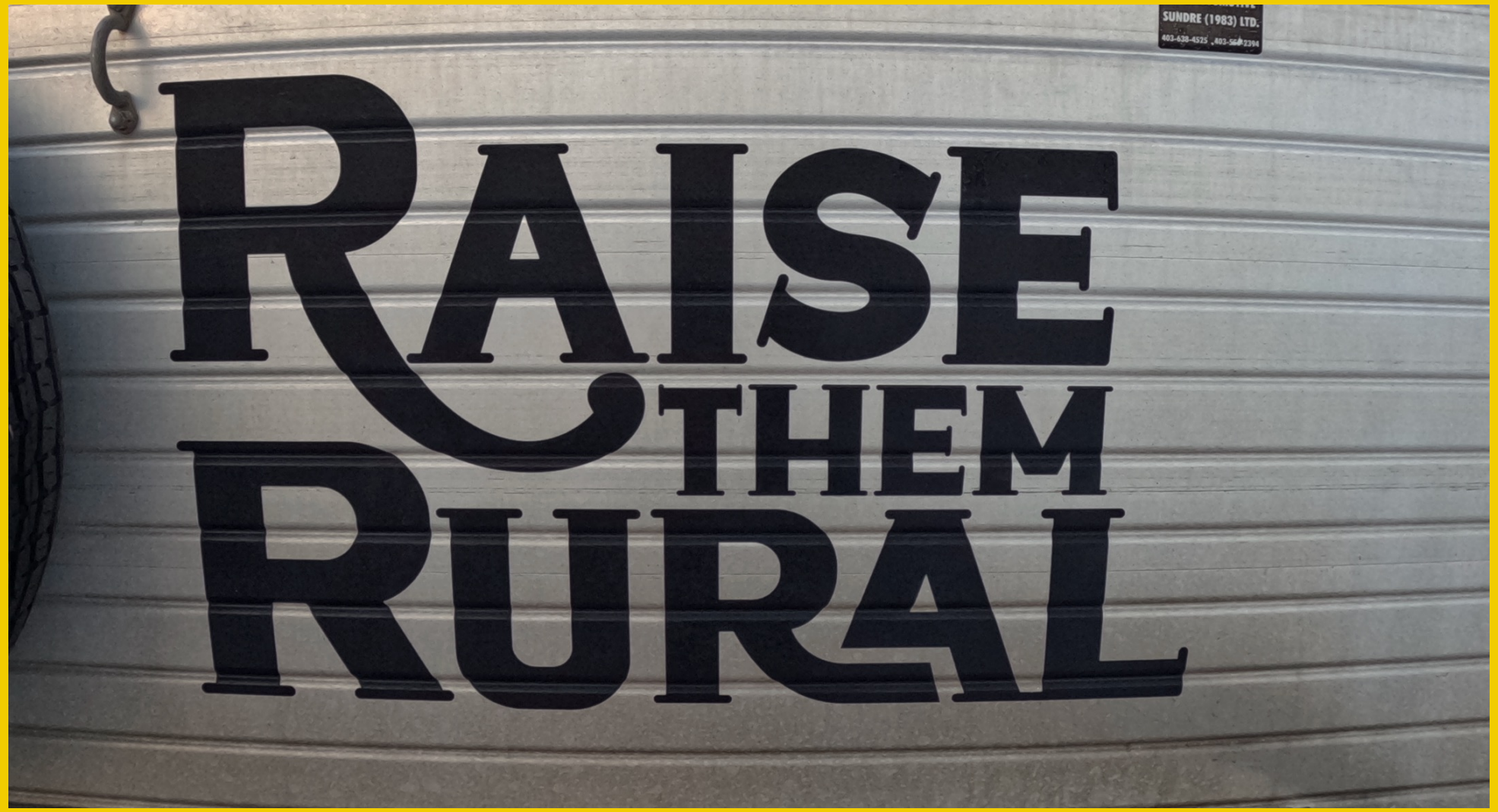
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Illustrator:
Avery Diwisch



Thank you for proving the value of rural education!



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Add Title Here

Your Title Goes Here

- Bullet item 1
- Bullet item 2

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Leading with Purpose.

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