

LAND AS A TEACHER: INDIGENOUS FOOD KNOWLEDGES AND PERSPECTIVES
FROM LONG PLAIN FIRST NATIONS

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Table of Contents

| | |
|---|----|
| Acknowledgements..... | 5 |
| Chapter 1: Introduction..... | 7 |
| 1.1 Background..... | 7 |
| 1.2 Purpose and Objectives..... | 8 |
| 1.3 Significance of Research..... | 10 |
| 1.3.2 Educational | 10 |
| 1.3.3 Community (Youth, Elders & LPFN’s food knowledge systems) | 11 |
| 1.4 Operations Definition..... | 12 |
| Chapter 2: Literature Review..... | 14 |
| 2.1 Experiences of Land based Education: Overview of Indigenous food-focused curriculum in Manitoba and Canada | 14 |
| 2.1.1 Implementing Strategies | 15 |
| 2.1.2 Benefits & Outcomes..... | 17 |
| 2.1.3 Language Ties Us to the Land | 18 |
| 2.1.4 Reclaiming a Cultural Connection..... | 19 |
| 2.2 Indigenous Food Systems | 21 |
| 2.2.1 Overcoming Challenges to Indigenous Food Systems | 22 |
| 2.2.2 Revitalizing Indigenous Food systems | 24 |
| 2.2.3 Pedagogy, Protocols and Teachings | 25 |
| 2.2.4 Wild Harvest & Community Contributions | 27 |
| 2.3 Curricular Initiatives & Innovations | 27 |
| 2.3.1 Curricular Initiatives in Manitoba & Canada..... | 29 |
| 2.3.2 Curricular Initiatives | 30 |
| 2.3.4 Community and Hands on Learning..... | 31 |
| 2.3.5 Early/middle Years Level Culture Program..... | 32 |
| Chapter 3: Research Design, Methods, and Approaches..... | 37 |
| 3.1 Building Blocks of Research Design | 38 |
| 3.2 Community and Participant Selection..... | 39 |
| 3.3 Data Collection Procedures..... | 40 |
| 3.4 Data analysis/validity/reliability | 42 |
| 3.5 Ethical Issues and Role of Researcher | 43 |
| 3.6 Self-positioning..... | 44 |
| Chapter 4: Outcomes of Land-based Learning <i>LPFN’s Participant’s voices</i> | 46 |
| 4.1 Rediscovering Indigenous Knowledge | 47 |
| 4.1.1 Intergenerational Transmission..... | 47 |
| 4.1.2 Generational healing | 49 |
| 4.1.3 Women’s Medicine..... | 50 |
| 4.1.4 Healing formula or practice | 52 |
| 4.1.5 Combining Modern and Traditional Knowledge..... | 53 |
| 4.2 Land-based Learning | 54 |
| 4.2.1 Description of Land-based Education for Youth..... | 54 |
| 4.2.2 The Joy of Land-based Learning | 56 |
| 4.2.3 Invest in the Youth..... | 58 |
| 4.3 Food Security and Well-being | 59 |
| 4.3. 1 Availability/Access to Medicinal Plants..... | 59 |

| | |
|--|-----|
| 4.3.2 Food Security/Food Access | 60 |
| 4.3.3 Healthy Lifestyle..... | 62 |
| 4.3.4 Successful Harvest..... | 63 |
| 4.4 Roles and Responsibilities | 65 |
| 4.4.1 Roles and Responsibilities as an Anishinaabe community | 65 |
| 4.4.2 The Good Life/Culture..... | 66 |
| 4.4.3 Innate Heart Work..... | 68 |
| 4.5 Local Support..... | 69 |
| 4.5.1 Community/Collaborative Support..... | 70 |
| 4.5.2 Other forms of support: Funding, Voluntary work, Relationship Building..... | 71 |
| Chapter 5: Challenges to promote land-based learning | 74 |
| 5.1 Need for Continuous Cultural guidance | 75 |
| 5.2 Food security and Sovereignty..... | 76 |
| 5.3 More Result-oriented local planning..... | 77 |
| 5.4 The Need for Land based Development and Programming..... | 79 |
| 5.5 Community Investment and Support | 80 |
| Chapter 6: Solutions to Address Challenges <i>Through Initiatives and Intergenerational Transmission of Knowledge from Elder-Youth Connections</i> | 83 |
| 6.1 Cultural Empowerment and Revitalization..... | 83 |
| 6.1.1 Encourage Traditional Practices | 84 |
| 6.1.2 Plant Revitalization Knowledge | 85 |
| 6.1.3 Intergenerational Transmission of Knowledge | 86 |
| 6.1.4 Medicine is food | 87 |
| 6.2 LPFN Participation and Partnership Building | 87 |
| 6.2.1 Family Oriented/Relationships | 87 |
| 6.2.3 Community Supports | 88 |
| 6.2.4 Elder Leadership | 88 |
| 6.3 Work in Progress..... | 89 |
| 6.3.1 A Hands-on Approach | 90 |
| 6.3.2 Finding a Balance | 90 |
| 6.3.3 Trust the Process | 91 |
| 6.4 Current Initiatives to Address Solutions to Land Based Education..... | 92 |
| 6.4.1 Food Security Programming | 93 |
| 6.4.2 Medicine/ Food Harvesting..... | 94 |
| 6.4.3 Organic Gardening..... | 95 |
| 6.4.4 Methods highlighting food knowledge systems and traditional practices | 95 |
| 6.5 Stewardship of the Land | 97 |
| 6.5.1 Cultural Rediscovery | 97 |
| 6.5.2 Hands-on Approach | 97 |
| 6.5.3 Innate Responsibility | 98 |
| 6.5.4 Sharing Reciprocity | 99 |
| 6.6 Community and School Collaboration..... | 100 |
| 6.7 Community Based Participation | 101 |
| 6.7.1 Community school Collaborations | 102 |
| 6.7.3 Opportunities/Support for Elder-Youth Connection..... | 102 |
| 6.7.4 LPFN Family Participation | 104 |

| | |
|--|-----|
| 6.7.5 Elder Leadership Consultation..... | 104 |
| 6.8 Early Learning and Implementation | 105 |
| 6.8.1 Intergenerational Transmission of Knowledge | 105 |
| 6.8.2 Early Middle Years Implementation..... | 105 |
| 6.8.3 Generational healing | 106 |
| 6.8.4 Learning Modern Technology and Embrace Diversity | 106 |
| 6.9 Learn Through Doing, Being and Seeing | 107 |
| 6.9.1 Inquiry based/Hands on learning | 107 |
| 6.9.2 Life Skills Building..... | 108 |
| 6.9.3 Long Term Planning | 109 |
| 6.10 Year-Round Food initiatives..... | 110 |
| 6.10.1 Food Sovereignty/Grow your own Food | 110 |
| 6.10.2 Year-Round Seasonal Programming..... | 111 |
| 6.10.3 Matriarchal Food Relations..... | 111 |
| Chapter 7: Summary, Conclusions and Future directions | 113 |
| 7.1 : Summary of Thesis and Keys Findings | 113 |
| 7.2 Vision for future Indigenous-food focused Land Based learning: Suggestions & Recommendations..... | 116 |
| 7.3 Elder-Youth Engagement..... | 116 |
| 7.4 Indigenous Food Knowledge Sharing..... | 117 |
| 7.5 Land Based program Implementation..... | 119 |
| 7.6 Healthy Food Advocacy | 10 |
| 7.6.1 Affordable Healthy Food Access | 121 |
| 7.6.2 Community Capacity Building through funding Support and Basic Rights Advocacy..... | 122 |
| Community capacity building..... | 122 |
| References..... | 126 |

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Chapter 1: Introduction

1.1 Background

The Truth and Reconciliation Commission (TRC) has noted that developing culturally appropriate curricula will play a vital role in the success of the next generation of Indigenous peoples of Canada (Battiste, 2002; 2005; 2009; TRC, 2015). In many Indigenous communities in Manitoba particularly, there are generations of Indigenous people, who do not know their own history, culture, language, or traditional practices that revolve around the land (Ball, 2004; Corntassel & Bryce, 2012; Pickering, et al., 2010). A land-based education program that intertwines Indigenous knowledge systems in the curriculum is a necessity and can be an essential tool for teaching Indigenous youth to be strongly connected to the land and the Indigenous cultures and languages that the land sustains (Styres, 2011; Takano et al., 2009; Wildcat et al., 2014). Land based education intertwined with Elders and knowledge keepers is an essential tool because of the fundamental value of gaining direct experiential learning off the land. Indigenous students should undeniably have an opportunity to learn about their traditional customs, practices, belief systems, which will assist them in developing survival skills, a sense of identity, self-esteem, and gain access to ancient knowledge systems, such as Indigenous food systems. Indigenous knowledge systems are imbedded in the theory that learning from the land, greatly influences a cultural revitalization (Fraser et al., 2007; Islam, 2016; Kamal et al., 2015). For this reason, Indigenous youth need to be reconnected to land based learning, in order to help in the restoration of their own community's culture, customs, practices and way of life.

To meet the calls to action through TRC on education, it is essential to utilize and reshape strategies that coincide with land-based education, such as a community-based approach. This approach requires the leadership and participation of the Elders, knowledge keepers, and school administrators in all aspects of the program, including access to the land, as well as the implementation of Indigenous education models (Corntassel & Hardbarger, 2019; Fieldhouse, 2012; Simpson, 2002). Through community collaboration, it is essential that more studies be conducted on culturally based education strategies, which will in return, enable Indigenous youth to become well educated in their Indigenous food systems.

Overall, it is apparent that Indigenous people, in rural communities are still experiencing many barriers to accessing their lands to hunt, trap, fish, pick and gather medicines, as well as access to cultural programming (Ambler, 1998; Scully, 2012; Sutherland, 2005). Access to Elders has always been an issue as well, hence the lack of intergenerational transmission of knowledge (Fontaine & McCaskill, 2022, Pickering, et al., 2010; Wildcat, 2014; Takano et al., 2009).

Therefore, this is why there is a high need to incorporate Indigenous food systems curriculum, through land-based education programming. This study will meet the need to support Indigenous youth, by learning from and building on the voices and perspectives of Long Plain First Nation (LPFN) knowledge keepers, and Elders experiences, and the educators perspectives on how the land is our teacher, specific too Indigenous food-focused early/middle years learning model in LPFN Manitoba. LPFN is used to appeal to the audiences viewing, and in no way is meant to take away from the communities' name and history associated with its rich cultural customs.

Purpose and Objectives: My proposed master's research is designed to platform the voices of the participants, Elders', knowledge keepers, and educators to develop a community-based and community-led vision of land-based learning. The LPFN is currently involved in collaborating with several partners to build on their Anishinaabe food knowledge systems curriculum model that lays out a solid framework, of how these food knowledge systems can be incorporated in their land-based education programming. The intent is to examine and answer three specific research questions:

- 1) What are the important outcomes of land-based learning, with a focus on Indigenous food systems from community perspectives of LPFN;
 - 2) What specific challenges of land-based learning experienced by the participants from LPFN;
 - 3) What potential strategies can be generated to improve the land-based outcomes and address challenges from the perspectives of LPFN community members.
- It is important to review what approaches have been taken in land-based education, that have enabled students to be successful. Also, it is essential to understand how Indigenous knowledge systems have already been integrated at the early/middle years level, because it is vital to developing a food-focused curriculum that is relevant to the youth in LPFN. The intertwining of Indigenous knowledge systems and land-based education will demonstrate how Indigenous students can be successful in retaining, restoring, and reclaiming their cultural identity, while also meeting the challenges to obtain be academically successful, through

experimental based learning that takes place on the land (e.g. hunting, fishing, trapping, harvesting, medicine picking etc.).

The theoretical framework intended for this research is based on The Circle of Courage Model designed for reclaiming youth at risk, as well as the LPFN's Medicine wheel teachings model. The circle of courage model and approach to learning integrates Indigenous child-rearing philosophies, as well as a western lens. This model provided a unique perspective on youth who have experienced some kind of difficulties, struggles or trauma in their life. This framework examines 1) the alienation of youth in today's society and how "young people are in desperate need of an antidote [such as, land-based education] to that malaise and anti-social lifestyles that accompany the loss of purpose" (Brendtro, et al., 2002 p. 35). 2) how a holistic model that infuses Indigenous philosophy on child-rearing development can help the youth build on becoming lifelong learners', because Indigenous "philosophies provide a powerful alternative in education and youth development" (Brendtro, et al., 2002 p. 43). 3) the alternative strategies and approaches to education, that encourage reclamation of one's environment. In order to reclaim their identity and feel a sense of belonging as youth, they need to establish meaningful relationships, and utilize alternative methods [such as, land-based education infused with Indigenous food systems] (Brendtro, et al., 2002 p. 70). The circle of courage model coincides nicely with Indigenous food systems curriculum development and Indigenous teachings of the four quadrants, based on the four cycles of life, which also naturally supports land-based education.

LPFN's Medicine wheel teachings model focuses on self-discovery and bringing forth ancestral knowledge that starts at the roots of Mother earth. This model is LPFN's constitution, it encompasses their Indigenous laws and holds sacred and ancient knowledge passed down to them by their families and cultural mentors. Both theoretical frameworks encourage community collaboration, hands on learning and differentiated learning. These models will be referred to predominantly in the following chapters as they focus on a sense of belonging and purpose, living a good life, working towards self-determination, and teachings of humility, as life-long learners. Both models are relative for young people to utilize, as it serves as alternative learning methods to meet them where they are at. These medicine wheel models are built on theory, but also a more practical approach, with strategies to assist and guide youth through a journey of

self-discovery and purpose in life. The Circle of Courage model and LPFN Medicine wheel model of learning, can fully support this research, in terms of the land-based educational strategies for the success of the future generations.

1.2 Significance of Research

1.2.1 Academic

This project contributes to a growing body of literature in three areas: 1) by exploring pedagogical strategies learned from land based innovations and community knowledge, that can be imbedded in LPFN's food-focused curriculum model (Campbell, 1997; Delormier et al., 2017; McNally, 2004; Settee & Shukla, 2020), 2) to illustrate how a participatory Indigenous food focused land-based curriculum at the early/middle years level will improve cultural outcomes, including revitalization of Indigenous knowledge systems (Simpson, 2002; Sherman & Sherman 2010; Sutherland, 1999), and 3) by generating suggestions and recommendations that can be formulated to guide Indigenous-food focused land-based pedagogical curriculum for educational institutions at an early/middle years level in Canada. LPFN will directly benefit from participation in their own Indigenous food-focused curriculum development, through consistent consultation in the design of their own curriculum model, and by being given a voice to collectively collaborate in the creation of their own Indigenous food systems model, so that it is specific and relevant to the community of LPFN. The ultimate goal is that LPFN will be able to utilize this model to help assist and guide their youth back to the land, where they will learn valuable teachings, as well as gain expertise-based skills in their traditional food and knowledge systems.

1.2.2 Educational

Although literature related to Indigenous food systems is growing, it still lacks content on pedagogical strategies directly related to food-focused curriculum. Pedagogical strategies can include using protocols, ethics, stories, talking circles, cultural practices and a land-based framework to developing curriculum. This framework supports the Anishinaabe (Indigenous) pedagogy, where their version of education includes, giving young people opportunities to interact and build relationships with language speaking Elders and knowledge keepers, participating in outdoor activities to learn through hands on personal experience, reclaiming

stewardship of their territory, language, identity and understanding their purpose, which will in return ignite a sense of belongings and personal success. LPFN is an ideal community to do the honorable work of assisting the community in preserving their knowledge systems, and because the community is within close proximity to the city of Winnipeg, this has resulted in direct and constant contact with the urban non-Indigenous community. LPFN's pedagogical systems of living and belief, were all directly related to Indigenous food systems and through this project we can integrate the Anishinaabe pedagogies. Communities, such as LPFN, who have historically faced challenges associated with education and lack of cultural connections in the community, are in need of immediate care and attention, in terms of how we can assist the future generation to a place that they can feel successful in all aspects of life, through enhancing the cultural relevance of food focused curriculum. This will begin with the Anishinaabe youth being given the chance to obtain a quality education through their own land-based program that is promoting food-focused curriculum, which is relevant to who the students are and the territory they reside in. The students will gain hands-on experience on how to sustain the knowledge of their Elders, through continuing to practice their customs which is considered the highest form of knowing in their communities and therefore an education that is held in high esteem and necessary to the cultural sustainability of LPFN.

1.2.3 Community (Youth, Elders & LPFN's food knowledge systems)

This study will benefit the community, the students, the land, and help preserve what is in danger of being lost, which in this particular case is LPFN's food knowledge systems. The food knowledge systems that need assistance with resurgence, are related to every aspect of the community and impacts them significantly. A resurgence in these knowledge systems will better ensure a more sustainable future if the youth are taught about their traditional medicines', gathering, hunting, trapping, fishing, and harvesting. The youth need to learn about how they are directly connected to the territory they reside in to ensure they have the skills, abilities, and knowledge to restore and sustain their traditions, customs, practices, and systems of knowledge, which will later be passed on to the next generation. This research will also meet the need to assist the youth in reconnecting with the Elders in a setting that is familiar to both and in an environment that is nurturing and fostering in a way that creates a safe place to learn, to be yourself, feel a sense of belonging, as well as a sense of accomplishment in their traditional knowledge systems. Finally,

the youth will be learning how to hunt, trap, fish, garden, and harvest, and this will be useful knowledge that they will be able to carry with them and be able to teach the next generation, for a more sustainable future in all aspects of personal and community growth and success. The reciprocal relationships that this research brings, helps to understand the significance of community in a larger degree.

By developing, designing, and implementing Indigenous food systems curriculum in LPFN, the community will directly address the revival, restoration, and rejuvenation of the community's traditional food systems, paradigms, traditions, and practices in relation to land-based education in Manitoba and Canada. Incorporating food-focused curriculum is for Indigenous youth in Manitoba, and will create a resurgence in Indigenous food systems knowledge, as well as better equip the youth with experiences that are holistic and taking place in their home territory. This type of relevant food-focused curriculum will thus create space for the youth from LPFN to begin their journey in becoming knowledgeable in their food systems through direct experiential land-based learning. The researcher was honored to be a part of an Anishinaabe project, because she is also Anishinaabe, and many similar customs, protocols, and practices are relevant to her life experience. Therefore, this particular topic ignites a personal connection, a deeper invested interest, as well as more passion, regarding how she can be of service to her people.

LPFN will directly benefit from participation in their own Indigenous food-focused curriculum development, through consistent consultation in the design of their own curriculum model, and by being given a voice to collectively collaborate in the creation of their own Indigenous food systems model, so that it is specific and relevant to the community of LPFN. The goal is that LPFN will be able to utilize this model to help assist and guide their youth back to the land, where they will learn valuable teachings, as well as gain expertise-based skills in their traditional food and knowledge systems.

1.3 Operations Definition

Culturally based curriculum: A fundamental learning tool used to meet the community's needs and will ensure relevancy to the educational units, lessons, lectures, and overall general learning outcome, which is based on history, land and traditions (Nightingale & Richmond, 2022; Kanu, 2006).

Indigenous Food Systems: Indigenous food systems can be defined as many kinds of various foods that are shared, eaten, harvested, and produced by a particular culture. (Kuhnlein, 2015; Kuhnlein & Chan, 2000; Tsuji & Liberda, 2020).

Traditional Food Systems: Traditional foods come from local and natural resources that are culturally relevant to their way of life. These foods also represent socio-cultural and nutritional aspects (Kuhnlein, 2015; Kuhnlein & Chan, 2000).

Revitalization: To act on the regeneration, restoration and reclamation of Indigenous knowledge systems and ways of knowing. To promote all aspects of relearning through a process of decolonization, that nurtures and fosters the teachings of Indigenous belief systems (Absolon, 2010; Pimachiowin Aki, 2012).

Good Way of Life: is an Anishinaabe principle of “good living” which teaches one another to live your life in the healthiest way possible. This means to have a goal of healing and growth, which applies to individual, communities, and all living things. This idea is collective in sense that it works to bring harmony, balance, growth, and wholeness (Pimachiowin Aki, 2012).

The Circle of Courage: is a holistic approach that focuses on belonging, mastery, independence and generosity, in order to nurture self-esteem, identity, and a sense of purpose in youth. This philosophy of child development has emerged from Indigenous teachings, where the goal has always been to empower and educate the children through a model that is significant, competent, powerful, virtuous and is taught using the medicine wheel, four quadrant model (Brendtro et al., 2002).

Chapter 2: Literature Review

This literature review has been organized into three important themes. The first theme that will be examined is experiences of land-based education in Manitoba and Canada, with a specific lens on food-focused curriculum. Second, will be an emphasis on how to design an Indigenous food system education model, that can be developed to assist in cultural revitalization of the Anishinaabe people's traditional way of life. Finally, a specific focus on what are the curricular initiatives and innovations that have been formulated to guide an Indigenous food-focused land-based curriculum at the early/middle years level in Canada. Through active engagement, and collective strategies and innovations, land-based education at the early/middle years can be implemented in a way that supports The Good Life, and how the youth are closely connected to their territory, language and identity, as Anishinaabe people and original stewards of the land. The Anishinaabe people understood that everything is directly connected to learning off the land, which is not something new to Indigenous people and this is why Elders, knowledge keepers and Indigenous youth are the experts that need to be consulted, with the allowing them the capacity and ability to lead the inquiry-based teachings of their traditional food systems. The Elders and knowledge keepers will be at the center of implementing curricular initiatives and innovations, with attention to Anishinabe food systems. This literature review will conclude with a summary, as well as identifying existing gaps for each theme.

2.1 Experiences of *Land based Education*:

Overview of Indigenous food-focused curriculum in Manitoba and Canada

The land-based learning programming that is currently being implemented throughout Manitoba and Canada examines local experiences through the facilitation of land-based courses. This land based pedagogy needs further research to assess the potential to this type of programming and how it can clearly strengthen Indigenous students' connection with their original ways of knowing (Bartmes & Shukla, 2020; Mcdonald, 2023). These programs that are implementing culturally based curriculum are including Indigenous practices and protocols of the land, which are aimed at cultural revitalization and restoration of the local Indigenous knowledge systems, such as Anishinaabe food systems. It is also essential to discuss that land based curriculum varies according to the outcomes that are most effective, relevant, and beneficial for a specific group of individuals. Factors to aim for, should be a strong cultural

support for building the bridges to implement land-based pedagogies and approaches to learning on the land. Indigenous knowledge systems encourage intercultural dialogue and shifts students understanding of their original ways of knowing ((Bartmes & Shukla, 2020; Mcdonald, 2023). Experiences of land-based education will enable the younger generation to have access to their traditional knowledge systems, to ensure the preservation of their culture and identity that is strongly connected to their territory, surroundings and land. Land-based curriculum in Manitoba and Canada naturally requires the incorporation of Indigenous knowledge systems, that are intertwined throughout hundreds of years of sacred and ancient knowledge, that has been passed down for generations, in order to live a Good Life and thrive off the land. Therefore, many Indigenous communities, are calling for assistance in the revitalization of their traditional knowledge systems, and this is also why land-based curriculum infused with Indigenous knowledge systems is necessary, and it is time to implement these strategies that are proven to be successful.

Land-based education programs and courses are slowly becoming more popular in terms of what time of the year the Indigenous communities are coordinating the course and the ages of the students involved. Manitoba and Canada are making a good start, although these programs need to be expanded to meet the individual needs of communities through a culturally based curriculum designed for Indigenous youth. Therefore, it is time to create, design and develop curriculum that is relevant and that is distinctive to Anishinaabe people, who already have an established sense of responsibility to stewardship, and who are connected through a strong relationship with their land and knowledge systems.

2.1.1 Implementing Strategies

There has been nothing but positive outcomes for Indigenous youth who have engaged in the traditional teachings, customs, and practices of their Anishinaabe ancestors, which includes, learning outdoors, hands-on learning, inquiry based learning, and experiential based learning (Bui & Yarsi, 2023; Pimachiowin Aki, 2012). During this learning and sharing, the youth are given the opportunity to identify with the land and find a connection that is culturally relevant to who they are, how they fit in to the world around them and how they are going to maneuver about in society, in a way that will support their future success in all aspects of life.

If the outcomes ensure the youth can feel and experience a sense of purpose, then learning on and from the land will assist the youth to their fullest potential and guide them to live The Good Life, where stewardship of the land takes priority for the sustainability and preservation of the next generations knowledge systems (McMillan, 2023; Pimachiowin Aki, 2012). Indigenous people's responsibility is stewardship of the land, and for this reason it can be understood that this strategy to learn on the land will undoubtedly be successful for Indigenous youth (Pimachiowin Aki, 2012). Land-based education has been proven to be successful for Indigenous youth, specifically if it is taking place in one's own community, where they can develop a sense of belonging, in a safe and nurturing learning environment, with culturally based curriculum that takes place out on the land (Corntassel & Hardbarger, 2019; Simpson, 2002; Sherman & Sherman, 2010). The most successful strategy to utilize, will be to consult the people of LPFN to design and develop the most relevant land-based curriculum through the voices of the participant in this study and Elder leadership. Following the lead of what the community wants will be key to creating and implementing the most effective and culturally relevant material for Indigenous youth.

The successful approaches to land-based education are experiential based and hands-on learning, which occurs on the land (Corntassel & Hardbarger, 2019; Simpson, 2002). Moreover, it has been proven that outdoor learning and education is one of the most successful kinds of programming, because it is designed to meet the needs of students academically, but also, in all other aspects that lead to a healthy lifestyle and deepened their connection to the land (Corntassel & Hardbarger, 2019; Fast, et al., 2021; Simpson, 2002). The implementation of successful strategies, such as land-based programming, brings Elders and youth closer, so that they can work together to develop land-based curriculum. It is vital that we inquire which are the best avenues to take, for the youth to feel a sense of accomplishment, while learning about their heritage, traditions customs and practices. The main objective for implementation, when it comes to Indigenous youth, should be to focus on working towards a collective revitalization, that compliments and encourages the passing on of intergenerational transmission of knowledge. Oral teachings, traditional stories and personal story telling are all fundamental for the preservation of Indigenous people's knowledge systems (Corntassel & Hardbarger, 2019; Simpson, 2002; Sherman & Sherman, 2010; Sutherland, 1999). In order to

preserve these systems of knowledge it is essential that the children, youth and families of LPFN have an opportunity to learn in their natural environment, which takes place on the Mother Earth, and through implementing strategies that include a process of cultural revitalization.

Implementing strategies that are rooted off the land is necessary to educate the students about basic life skills practiced by Anishinabe people since the beginning of time, such as cooking on an open fire, hunting, trapping, fishing, and harvesting, all provide students with the opportunity to engage in experiential based learning, where a sense of connection naturally occurs (Corntassel & Hardbarger, 2019; Fast, et al., 2021; Simpson, 2002; Sherman & Sherman, 2010). The underlying way for Indigenous youth to be successful and feel a sense of purpose, is to immerse themselves in their original Anishinaabe teachings, which occurs on the land, with the Elders, knowledge keepers, family, and community. By focusing on ways to implement these strategies in land-based programming, it will ignite a restoration of traditional values and systems of knowledge, that the students may not otherwise have access to. Also, this research will fulfill a need for the community to engage in innovative approaches to land-based education, that are successfully implementing food-focused curriculum. And finally, to meet the specific needs of a territory and people, a relevant curriculum should be designed to incorporate Indigenous protocols.

2.1.2 Benefits & Outcomes

Through developing curriculum in land-based programming, Indigenous students will be able to immerse themselves in knowledge of their cultural, pedagogies, languages, traditions, customs, and practices, while gaining a quality education, a sense of purpose and personal success. The benefits and outcomes that land-based programming promote, will better support Indigenous students positive progress, in all aspects of life. Some of the benefits to land-based activities include hands-on, experiential based learning, inquiry-based learning, and a deeper understanding of their cultural identity which is naturally connected to the land, in which the students will learn (Kana'iaupuni, et al., 2010; McKinley & Smith, 2019; Williams & Dixon, 2013). By incorporating a model that is culturally relevant to the Anishinaabe people of LPFN will encourage, engage, and ensure in the preservation of knowledge systems. Land-based learning for Indigenous youth will allow these students to gain access to the benefits and outcome that will

further assist in the passing on of intergenerational transmission of knowledge, that is imbedded in land-based programming (Kana'iaupuni, et al., 2010; McKinley & Smith, 2019; Williams & Dixon, 2013). Therefore, the benefits and outcomes to land-based learning far override any barriers that exist. The communities doing this work are ensuring that the youth have an equal opportunity to an education, both a formal education and a land-based learning environment, where the Anishinaabe youth can be taught by the people of the land. This work and invested time in the youth has always been vital for the sustainability of the next seven generations to come. The students will learn about their traditional knowledge systems, so that it can be passed on to the next generation and revitalized for the unborn future generations to come.

For land-based education to be effective, it is vital that the curriculum being taught is direct in its intention to deliver a relevant knowledge base, which meets the needs of Indigenous students based on their territory, language, and particular group, such as the Anishinaabe people. Land-based education can be seen as innovative, because it immerses itself in a variety of disciplines that are relative to hands-on learning, inquiry-based approaches, and observations, which naturally supports land-based stewardship. The benefits of land-based education also enhance the significance of Indigenous knowledge systems and learning in its many forms, educating for health and nutrition, and supporting students in all aspects of life (Kana'iaupuni, et al., 2010; McKinley & Smith, 2019; Williams & Dixon, 2013). If land-based education can create students who demonstrate positive outcomes, from having been a participant in the program, then it should then be examined further how implementing Indigenous knowledge systems, pedagogies, and protocols, can create a resurgence in Indigenous youth. Due to the wide range of benefits and outcomes for Indigenous youth, is why there is a need for this type of land-based programming to be integrated in the curriculum throughout Manitoba and Canada.

2.1.3 Language Ties Us to the Land

Language and land are not separate from one another, Indigenous people see the earth as their Mother and have developed the understanding that they carry the responsibility and inherent right to take care of the land through stewardship. Language is and will always be an essential part of learning off the land. Without the local Indigenous languages being spoken, Indigenous youth will lose a sense of who they are and how they are related to all living things. The earth and Indigenous languages support all systems of life, by giving an in depth

understanding of how we are all interrelated, interconnected and how language is what makes Indigenous people continue to be recognized as a distinctive group of people with their own systems of knowledge, that are naturally meshed with the local language of the land. Many Indigenous people's lessons were facilitated through the telling of the stories of their knowledge systems through their local language (Graham, 2005; Hermes, 2005; Perley, 2011). The local language is closely connected to the land and all traditional knowledge systems and through teaching the language, the youth will naturally feel a connection as well as gain a deeper understanding of themselves and their environment, while learning their mother tongue.

It is known that language is what sustains Indigenous cultures and in LPFN this is related to their creation story which tells of the second gift given to the people in the beginning of time; the gift of language, a tool in which to communicate with the Creator, encompassing one's mind, body spirit and all things. Well then, it is also fundamental that Indigenous youth learn to speak their local Indigenous language. One strategy that can be utilized to revitalize land-based learning and Indigenous food systems, is through teaching the language, because language is carried through generations and its interconnectedness relates to the land as one's first teacher and caregiver (Hermes, 2005; Perley, 2011; Styre, 2011) In more current times, Indigenous people are beginning to engage in taking on their responsibility to do the work necessary to ensure that their languages are sustained for future generations. It is understood then that languages can be viewed as a resource, and this would ensure the survival of the language (Abele et al., 2011; Graham, 2005; Perley, 2011). Language is central to teaching the youth who they are and by intertwining the language, customs, practices and knowledge systems in land-based programming, our youth will have an opportunity to engage in learning their local language.

2.1.4 Reclaiming a Cultural Connection

The most effective approach to reclaiming a cultural connection for Indigenous youth revolves around guidance the youth can receive, in terms of support for them to have the opportunity to practice what it means to live The Good Life (Pimachiowin Aki, 2012) and reclamation of a cultural identity can occur through land-based education programming, because it is proving to be an effective model, that can create a cultural resurgence for Indigenous youth. The development of land-based programming, such as the restoration of the Anishinaabe food systems through land-based education, can easily go hand and hand with elders and culture because they are the

knowledge holders who carry the wisdom necessary to ignite the youths' learning, as well as sense of identity connected to who they are as Anishinaabe people. It is important to emphasize that in order to restore and preserve the knowledge systems on the land, it is vital that only through the knowledge keepers and Elders can one fully understand the unique relationship to the land, the connection and natural value system that enhances Indigenous people's distinctive identities (Ball, 2004; Corntassel & Bryce, 2012; Pickering, et al., 2010). The Elders are the knowledge keepers, they are the ones who can guide Indigenous youth in the direction that has sustained Indigenous cultures and knowledge systems, through their wisdom of the culture and by their ability to tell stories and be able to relate to the younger generation. Therefore, it is the educators, community members, families and youth that need to fully engage in promoting an environment where youth are provided with the opportunities to learn about how to reclaim their cultural identity through learning off the land. It is in such settings as these, which will more effectively assist community building projects that are educational, and work towards positive Individual change, but most importantly promote opportunities for the youth to reclaim their cultural identity and connection to the land.

Another fundamental aspect to reclaiming a cultural connection for Indigenous youth, is to address the most effective learning tools for the youth when it comes to reclaiming their cultural practices, customs, and traditions. These learning tools include hands on experience learning about hunting, fishing, trapping, and picking medicine or harvesting, with the Elder and knowledge keepers. Through developing initiatives that promote cultural connections for Indigenous youth, educators and communities have found that Indigenous land-based initiatives are a key concept in relation to reconnecting these youth to their traditional territories, communities, and cultural practices, that are centered on regenerating, restoring, and reclaiming a relationship with the land (Pickering, et al., 2010; Wildcat, 2014; Takano et al., 2009). Indigenous belief systems, paradigms, and ways of knowing (such as knowing how to hunt, trap, and harvest) is what has ultimately sustained these communities for thousands of years. Therefore, Indigenous communities have an inherent right to work towards revitalizing their traditional ways of life that involve spiritual, cultural, and social interactions that are grounded in a reciprocal relationship, which has sustained Indigenous people for generations (Abas, et al., 2022; Pickering, et al., 2010; Wildcat, 2014; Takano et al., 2009). Reclaiming Anishinaabe traditional practices to sustain life in all aspects, such as guiding the youth be contributing

citizens who are knowledgeable in their culture, speaks for itself. Also, this type of land-based programming, relevant to Anishinaabe people will act as the beginning step towards Indigenous food sovereignty, where LPFN is able to experience a cultural connection and revitalization through land-based programming, including, gardening, harvesting, cooking, medicine picking, hunting and trapping.

2.2 Indigenous Food Systems

The opportunity for Indigenous youth to learn about their Indigenous food systems is important because Indigenous food-focused curriculum can bridge the gap in education and create a resurgence in Indigenous youths' knowledge systems, but also in terms of academic success. Indigenous communities in Manitoba and Canada recognize the value that the local Indigenous food systems have, and it is understood that there needs to be a prioritized food policy around local food systems, their livelihoods of providing food, as well as lessening the dependency on store bought food, which will shift food systems from corporations to local food providers (Kamal et al., 2015; Kuhnlein, 2015; Kuhnlein & Chan, 2000). Indigenous food systems acknowledgement in early/middle years curriculum can offer a unique alternative system and this includes Indigenous knowledge, land-based practices, and innovations that can serve as alternatives to the revitalization of Indigenous food systems. It can be understood then, that to effectively preserve Indigenous food systems it will take the engagement and commitment of the Indigenous community to collaboratively work with others who carry the same passion to revitalize their food systems through a working framework, for the next generations' sustainable future and well-being. (Bihari, 2023; Lavallee, 2023; Settee & Shukla, 2020).

Indigenous food systems have many valuable teachings associated with the knowledge and way of life that has enriched the lives of Indigenous people for thousands of years, and today Indigenous people still want to participate in the revitalization of their traditional food systems (Kuhnlein & Chan, 2000; Rudolph & McLachlan, 2013; Turner, 2018). The need for a food focused curriculum for Indigenous youth can be highly prioritized in a time when Indigenous communities are recognizing the ongoing food insecurity, which is also related to poor health and this continues to prevent Indigenous food sovereignty, while destroying the natural environment that sustains healthy, traditional food systems (Hanemaayer & Peeter, 2022; Kuhnlein, 2015;

Kuhnlein & Chan, 2000; Rudolph & McLachlan, 2013). This is why it is so important to immerse oneself in the study of Indigenous food systems, because it advocates for decolonization, through land-based programming. The overall focus of this project is to learn from and support community-based initiatives, where the young people have an opportunity to reclaim the land through their Indigenous food systems such as, by hunting, harvesting fishing, berry picking, trapping, building community gardens, participating in wild food programming, as well as other cultural teachings and practices. This is also why it is fundamental that Indigenous programs, organizations and partners, work together to utilize political anchors and allies, so that theory turns to practice (Kamal, et al., 2015; Kuhnlein, 2015; Kuhnlein & Chan, 2000; Miltenburg & Anderson, 2022). Opportunities for the youth to participate in activities in their traditional food systems, are meant to create a sense of empowerment and well-being, which will then create a sense of belonging, identity, independence, cultural connectedness and knowledgeable in their food systems. Not only will the youth become knowledgeable in their food systems, but they will also be able to overcome challenges, revitalize their culture, utilize traditional pedagogies, protocols as well as teachings.

2.2.1 Overcoming Challenges to Indigenous Food Systems

Although there are some efforts to restore, reclaim and rejuvenate Indigenous food systems there have been many challenges. The challenges that exist in reclaiming Indigenous food systems is that use of local food systems has declined in more recent years, and it has been replaced with store bought foods (Campbell, 1997; Delormier, et al., 2017; Fieldhouse & Thompson, 2012). To overcome the challenges of store-bought food, versus traditional food found on the land, we will undoubtedly start with teaching children and youth how to live, hunt, gather, fish, and sustain the land for future generations. It is essential then, to look at successful strategies that have been implemented to engage Indigenous youth and communities in initiatives that are based around their traditional food systems, such as land-based programming, workshops, and gatherings (Settee and Shukla, 2022) such as feasts, giveaways and potlatches. Approaches that support Indigenous food systems is fundamental to Indigenous communities because they still view hunting, fishing and trapping as important activities in their communities, which is also consistent with the perspective that traditional practices are resilient to change and will continue to survive (Campbell, 1997; Delormier, et al., 2017; Fieldhouse & Thompson, 2012). It can be understood then, that in order to overcome the challenges that are

creating current barriers in relation to Indigenous food systems and land-based programming, there clearly needs to be an increased attention, as well as access to resources when it comes to these traditional foods and integrating them into the education system at the early/middle years level.

Some of the challenges that exist for implementing Indigenous food systems in the mainstream education systems' curriculum, are due to cultural differences. Because, while Indigenous students are trying to connect to the land and achieve academic success this way, the more structured way of learning in the classroom does not offer the same knowledge base and can be conflicting in perspectives. These opposing views of forced assimilation and colonial ways of thinking can contradict the ability for Indigenous youth to live the Good Life, that they were intended to by their ancestors. This in itself can be a challenge when youth are not supported in learning about their customs, practices and languages and Indigenous knowledge systems, which is why Indigenous food systems should be utilized to meet the demanding needs of the high population of Indigenous youth, so that they can revitalize their traditional food systems for future sustainability. However, it has been shown that land-based work directly related to Indigenous food systems, coincides nicely with the academic portion of overcoming these challenges because this type of hands on, inquiry based learning is designed and intertwined in a way that compliments and encourages immersion of cultural differences through holistic learning (Bartmes & Shukla, 2020; Okpalauwaekwe, et al., 2022).

Another challenge for implementing land-based pedagogies that will support Indigenous food systems is related to a lack of research on the topic, of how to successfully facilitate land-based curriculum effectively at the middle/year's level. Moreover, there is lack of literature that refers to Manitoba specifically in terms of land-based programming at this level (Bartmes & Shukla, 2020). Indigenous youth have shown a great interest in this innovative, and alternative form of education that is being offered through a hands-on, experiential-based learning on the land, which has proven to nurture the youths' identity, as well as ensure they can achieve their academic goals (Fontaine & McCaskill, 2022; Settee & Shukla, 2020). The intent of this research has a specific focus on Indigenous food systems because it is relevant to the students learning, but also engages the youth to learn about their heritage, while becoming stewards of the land, as well as knowledgeable in their food systems.

If Indigenous food systems are taught to youth at the early/middle years level, through land-based programs, they will carry that knowledge with them and pass it on to the future generations to come. This will in return enable the youth to revitalize their Indigenous food systems. This research calls for Indigenous food systems, Indigenous education and land-based education to be revitalized through Indigenous knowledge systems, languages, and cultural practices, customs and traditions. Therefore, Indigenous communities and youth will meet these challenges, if they are given an opportunity to be in control of creating their own food-focused curriculum through land-based programming, youth stewardship, and the inter-generational transfer of knowledge provided by the Elders and knowledge keepers. Overall, it is indicated that land-based education programs surrounding Indigenous food systems can act as a cultural resurgence for Indigenous youth, thus resulting in overcoming the challenges at hand. Through intertwining knowledge around Indigenous food systems in the current curriculum we can enable the students to learn about their traditional pedagogies and protocols that are naturally imbedded in Indigenous ways of knowing. This is how effective strategies work, when teaching the youth about their traditions, customs, practices, pedagogies, and protocols attached to their food systems (McNally, 2004; Morton, et al., 2020; Skinner, 2013; Thompson, et al., 2014). If challenges are to be confronted and overcome, it is apparent that Indigenous food systems be a fundamental part of the curriculum for Indigenous youth.

2.2.2 Revitalizing Indigenous Food systems

It is essential to discuss the revitalization of Indigenous food systems because this is how the youth can be encouraged to learn about themselves, their food systems, as well as many other valuable practices that have been passed on from generation, mainly because it was useful and progressive to who Indigenous people are, on all scales and cycles of life. Revitalizing initiatives are being put into place for implementation, commonly in the more current years, because educators are discovering that that Indigenous communities, Elders, and knowledge keepers want to actively engage in guiding the participation of the youth in land-based activities. This guidance and encouragement to work as a community is a vital piece in revitalizing indigenous food systems, because collaboration need to happen in order to reclaim and restore the Indigenous food systems such as; hunting, trapping and fishing, harvesting, medicine picking and many other wild food activities (Mihsuah & Hoover, 2019; Islam, 2016; Islam, et al., 2017). Due of the importance of passing on intergenerational knowledge in Indigenous food

systems, food focused curriculum will work to initiate cultural changes that preserve Indigenous food systems.

Ultimately, through learning about the revitalization of Indigenous food systems, the goal is to empower Indigenous youth to a place of cultural connection to the land and systems of knowledge it contains. It is vital that Indigenous youth in rural communities particularly, learn these traditional knowledge systems from the elders and knowledge keepers to preserve what is in danger of being lost. The objective for Indigenous youth, is to provide them with the supports to explore and experience first-hand, about their traditional food systems, because young people need to be engaged in the revitalizing of Indigenous traditions and culture that serves as a long-term food security plan (Islam, 2016; Islam, et al., 2017; Mihesuah & Hoover, 2019; Poirier & Neufeld, 2023). Collaborating with LPFN to design and develop food focused curriculum will play an essential role in the revival of traditional food harvests and this also involves taking part in the relearning of the nutritional values that these foods contain (Islam, 2016; Islam, et al., 2017; Mihesuah & Hoover, 2019; Poirier & Neufeld, 2023). Indigenous knowledge is dynamic in a way that it can only be experienced through hands on learning, and not something that can be read about. Indigenous food systems must be learned on the land because traditional knowledge comes from the land, and further allows one to understand how to hunt, find food and how to harvest, through hands on learning from the Elders and knowledge keepers. Therefore, addressing specific aspects of cultural revitalization through reclaiming Indigenous food systems can actively engage youth, to become knowledgeable in their traditional food systems, Indigenous pedagogies and allow them to be academically successful at the same time.

2.2.3 Pedagogy, Protocols and Teachings

The current mainstream educational system is failing Indigenous youth, and this has been due to an array of factors, which has resulted in the absence of a clear educational philosophy that provides and promotes meaningful programming for Indigenous youth. Therefore, a quality education for Indigenous youth, must be based on their own pedagogies, protocols, teachings, and traditional knowledge systems, on Indigenous history, narratives, on the land and through the local language, spoken by telling of the past, present and future (Absolon, 2011; Fontaine & McCaskill, 2022; Matthews, 2011; Pimachiowin, 2012; Wheaton, 2000). The fundamental element to Indigenous food systems is interrelated with Indigenous pedagogies, protocols,

teachings, and way of life. It is apparent then, that the Indigenous people's systems of belief, customs, traditions, and ways of knowing are at the forefront of teaching LPFN future generations. Moreover, it is essential to understand how an Indigenous protocols and teachings are fundamental concepts, because they carry ancestral knowledge from the theories, ideas and research that informs meaningful learning (Absolon, 2011; Fontaine & McCaskill, 2022; Matthews, 2011; Pimachiowin, 2012; Wheaton, 2000) if Indigenous youth are given the opportunity to learn from their traditional paradigms, belief systems and ways of knowing.

The wise approach to teaching the youth about their traditional food systems through land-based education, will be through a theoretical framework that is interrelated to all systems of Indigenous knowledge systems. This can only be experienced hands on, through the educational guidance of Indigenous pedagogies, protocols, and teachings which in this case will be The Circle of Courage model, designed for Indigenous youth (Brendtro, et al., 2002). An Indigenous lens on stewardship of the land, food systems and traditional practices encourages collaboration, experiential based exploration of oneself and a resurgence in their ancestral knowledge systems through pedagogical teachings (Brendtro, et al., 2002; Bryer, 2023). For Indigenous communities, pedagogies, protocols, teachings, and the role of education has always been at the forefront of all systems of beliefs. The transmission of knowledge is vital to the preservation of Indigenous pedagogies, that is why it important that Indigenous youth learned about their distinctive values systems, beliefs, and traditional practices (Bryer, 2023; Matthews, 2011; Pimachiowin, 2012; Wheaton, 2000). If Indigenous pedagogies are included in the youths learning, then Indigenous foods systems knowledge, will naturally be shared, expanding the knowledge and understanding around Indigenous systems of belief. The fundamental concept of pedagogical beliefs that Indigenous youth will be successful in all aspects of life, if they are able to learn on the land, is intertwined in Indigenous protocols, teachings, customs, traditions and practices, and they all work in unity to establish values, that support the Good life. This is why it is essential to teach the youth about their traditional systems of knowledge, so that they can be guided to develop a sense of identity, belonging and purpose, while ensuring their academic success.

2.2.4 Wild Harvest & Community Contributions

The traditional role of Indigenous knowledge systems in relation to wild harvest and how the community is involved varies throughout communities, but what they all have in common is reciprocity. The reciprocal relationship that Indigenous people actively engage in, in their communities is part of their value system that supports the sustainability of harvesting their own food and sharing it with the community. However due to policies and colonial barriers, Indigenous communities in rural areas in Canada, have gone through a transitional period where the community went from eating and harvesting a traditional diet of games, such as birds, mammals, and fish to a more modern diet that is controlled through government standards (Atleo & Boron, 2022; Gombay, 2010; Spiegelaa & Tsuji, 2019). Wild Harvesting was once a very common practice among Indigenous people and the youth. Traditionally, Indigenous people designed and operated through the traditional knowledge systems, to feel a sense of responsibility to the community, and many still take this role very serious, because they understand how they need to come together as a collective to contribute their special skills and abilities to assisting their community to continue the practices that sustain their traditional food system (LaRiviere & Crawford, 2013; Leach, et al., 2020). Wild harvest and community contributions worked in harmony for reciprocity and to fulfill family and community responsibilities to maintain a sustainable and balanced diet.

Wild harvest involves the community's participation in a variety of land-based activities related to Indigenous food systems, including medicinal and food plant harvesting, fishing, trapping, and hunting. Activities like these are predominantly initiated by the knowledge keepers, and elders, who actively work to create opportunities for the community to engage in their traditional practices that are sustainable and necessary for the community to produce and harvest their wild food systems (Gombay, 2010; LaRiviere & Crawford, 2013; Leach, et al., 2020). Opportunities to directly experience land-based harvesting, is also a community responsibility that is shared in the communities to ensure their reciprocal value system can continue to work in a structured and sustainable way.

2.3 Curricular Initiatives & Innovations

When examining successful curricular initiatives and innovations to land-based education that will contribute to food-focused curriculum for Indigenous youth, it is essential to turn to the

protocols of the Indigenous community you wish to work with to assist this important work. The protocols are in alignment with the believe system from which Indigenous people obtain their knowledge base from, in order to live in a good way that respects all living things. Culturally based curriculum, land-based education, and most importantly Indigenous pedagogies need to be explored, in order to develop a deeper understanding of cultural practices and how an educational context imbedded with these practices can create an experiential-based approach to successful learning off the land. This innovative approach to learning carries a gift of fully experiencing the richness of one's own understanding and personal connection to their environment and sense of self (Fellner, 2018; Kanu, 2006; Redvers & Blondin, 2020; Snow & Obed, 2022). Curricular initiatives and innovations in this context, are directly related to the incorporation of culturally relevant curriculum that is imbedded in Indigenous pedagogy, that supports and enhances the youths learning. The initiatives that are being conducted and deemed successful are using an approach that looks at the communities needs and listens to the voice of the community (Fellner, 2018; Kanu, 2006; Redvers & Blondin, 2020; Snow & Obed, 2022). The goal in this working concept to assist the youth in reclaiming their Anishinaabe knowledge systems, helps the narrative of the community become something tangible for the youth to learn and restore their hands on, oral teachings, ways of knowing and holistic approach to learning.

The most successful initiatives that have been innovative so far, have predominantly been designed and implemented with the collaborative partnership with the community itself (Fellner, 2018; Kanu, 2006; Redvers & Blondin, 2020; Snow & Obed, 2022). Curricular initiatives and innovations are directly linked to the community and their pedagogies, protocols, and belief systems. Indigenous people's distinctive approach to learning, supports what the community needs this in return, will assist the youth to engage in reclaiming their identity, connection to the land and to become knowledgeable in their traditional practices, while also gaining academic success. Culturally relevant curriculum needs to be developed, and in order to create and design curriculum, we need to ask for the communities' leadership, knowledge keepers, and elders to help guide the initiatives and innovations. By following the Indigenous protocols and ethics specific to the Anishinaabe territory and people, practices such as talking circles, land-based activities and storytelling, are known successful approaches (Fellner, 2018; Kanu, 2006; Redvers & Blondin, 2020; Snow & Obed, 2022). It would be a wise practice then, to utilize their land-based approach to learning that is experiential based, and includes, language, land based

activities, elder youth connection and much more. The rewards of developing a food focused curriculum for high school students, far outweigh the challenges, and for this reason more initiatives and innovation collaboration need to happen to support to coming generations of Indigenous youth.

2.3.1 Curricular Initiatives in Manitoba & Canada

In more current curricular initiatives', there has been a move forward for Indigenous culture, language and learning on the land their traditional practices (Mashford-Pringle & Stewart, 2019; Robidoux & Mason, 2017; Tsuji & Liberda, 2020). These practices are essential for the growth of Indigenous youths' sense of identity, purpose, belonging, personal success and feelings of achievement. There have been successful curricular initiatives developed in Manitoba, that are designed to support the youth in a way that will guide their future endeavors, and this is because what they are learning is relevant to who they are as Indigenous people (Mashford-Pringle & Stewart, 2019; Robidoux & Mason, 2017; Tsuji & Liberda, 2020). The initiatives' that are currently being put into action are mostly through community-based approaches because it tends to fully meet the distinctive cultural practices of the community it wants to serve (Mashford-Pringle & Stewart, 2019; Robidoux & Mason, 2017; Tsuji & Liberda, 2020). These successful initiatives imply that land-based education will therefore be a community collaboration, which will then also ensure the relevancy of the curriculum, specific to culture, language and territory. Curricular initiatives' that are related to Indigenous food systems and land-based programming in Manitoba and Canada are opportunities, specifically for Indigenous youth to learn about Indigenous ways of pedagogies, protocols, practices, customs, and traditions.

Land-based curricular initiatives in Canada and Manitoba, mostly focus on Indigenous knowledge systems, because this can be seen as a wise approach to education, as it is understood that land is an instrumental part of the curricular developments that are designed specifically for the success of Indigenous youth (Johnson & Ali, 2019; Mashford-Pringle & Stewart, 2019; Robidoux & Mason, 2017). Land-based education, culturally relevant curriculum and community collaboration will all play a key role in how these initiatives will develop in order for the youth participants to reclaim their Indigenous identity and cultural practices, while also becoming academically successful. This positive move towards delivering a curriculum that is

culturally relevant to Indigenous people's knowledge systems, pedagogies and protocols is anticipated to improve the sustainability of their culture (Johnson & Ali, 2019; Mashford-Pringle & Stewart, 2019; Robidoux & Mason, 2017). Curricular initiatives' being facilitated in Canada and surrounding territories have a goal of promoting The Good Life, which is to live a healthy life and to create one's own well-being in every aspect of life (Pimachiowin Aki, 2012). If the goal is to develop curricular initiatives that work and are deemed successful for Indigenous youth, then it is time to focus on key elements, such as community engagement, the preservation of knowledge systems and connecting young people to the land.

2.3.2 Curricular Initiatives

Curricular initiatives have come to depend on community-based knowledge systems, on a local level throughout each community, place and distinctive group of people, because throughout these experiences, educators, researchers and communities are able to further understand how learning off the land is beneficial for youth in a way that meets their need to live a healthy lifestyle, as well as achieve academic success. Through community collaboration and initiatives, which aims to meet the needs of the community, is how it is possible to develop and implement a more culturally relevant way of learning, but also through a formal curriculum based knowledge (Gartaula, et al., 2020). Also, food security issues have brought more awareness for the need to implement land-based education in the curriculum, globally (Gartaula, et al., 2020). This way of thinking is at a local level, and in more recent years the academic world has caught on to the benefits and positive outcomes that these particular initiatives can achieve for youth, when integrating this learning in the curriculum.

Curricular initiatives that are taking place on a local level, all have a focus on the land because it is known that the outdoor activities are essential components, when it comes to the relevancy of the material being delivered, and particularly for Indigenous students across the world. It is appropriate to point out then, how the emphasis on Indigenous knowledge systems can create experiential based engagement, as well as culturally based curriculum for Indigenous youth (Glasson et., al, 2006; Riggs, 2007). Land-based learning and its emphasis on outdoor activities has always been a global practice throughout cultures (Glasson, et al., 2006; Riggs, 2007). When curricular initiatives are happening in a natural environment, they are proving to be successful, because the students are finding this type of programming to have positive outcomes

in terms of finding out who they are, how they are connected, a sense of belonging, purpose, a deeper understanding of climate, roles, responsibilities Indigenous knowledge systems and ways of knowing.

The interconnectedness that sustains life is taught off the land by all Indigenous people, and is therefore considered a global teaching tool, that should be utilized for curricular initiatives. It is through a deeper understanding of cultural knowledge systems, that will assist Indigenous students throughout the world, to be able to successfully build on the relevancy of their own knowledge systems, history, territory, and people. Strategies to achieving culturally-based and relevant programming globally includes cultural, environmental, and traditional roles and responsibilities learnings, which are embedded in the inquiry-based lessons. (Glasson, et al., 2006; Riggs, 2007). Additionally, designing curricular activities that are implemented on the land can be seen as an innovative approach to Indigenous students' learnings globally. Indigenous knowledge systems are being taught and are proving to be successful avenues of learning.

2.3.4 *Community and Hands on Learning*

The community's knowledge is fundamental to the students' future success; therefore, it is essential to utilize community-based approaches that have been utilized in Manitoba and Canada, in order to develop collaborative solutions and a shared vision on designing, developing and implementing Indigenous food systems curriculum (Ball, et al., 2008; Coppola & McHugh, 2018; Malandra, 2023). Through the guidance of the community, the development of culturally relevant curriculum, will focus on Indigenous food systems. Part of the objective for taking on this research is so that the future generations can then carry the essential knowledge necessary to pass on their traditions, practices, and customs. This is why it is fundamental that the community, Elders, knowledge keepers, families, and youth participate in creating, designing, developing and implementing relevant projects and initiatives in their community (Ball, et al., 2008; Coppola & McHugh, 2018; Malandra, 2023). By learning how to build on wise practices, when it comes to working directly with a community, it is recommended that you engage the community through hands on activities, but also incorporate culturally relevant material that compliments their inquiry based, land-based and experiential based ways of learning, knowing, doing and being.

Indigenous communities' have an ethical framework that includes a hands-on approach, that works to guide youth towards capacity building and learning, based on experiences that will benefit the individual, but also the community as a whole. Community learning, and hands-on learning involves, drawing on various forms of cultural knowledge and experiences, which also includes shared decision-making, responsibilities, and building capacity through directive and intentional learning, and through a community dialogue and action process that meets that promotes environmental stewardship (Castleden, et al., 2012; Grimwood, et al., 201; Reed & Diver, 2023). Connecting communities through curricular initiatives, can create a variety of opportunities for the community it serves. Hands-on, outdoor, land-based programming and food-focused curriculum can all contribute to community capacity building, the nurturing of relationships and a lived experience. If Indigenous youth are to be academically successful, they need to be assisted in re-connecting to the land through their community, and through experiential-based learning, which will in return create a cultural resurgence and, in this case, specific to their traditional food system that are harvested, hunted and gathered in their home territory.

2.3.5 *Early/middle Years Level Culture Program*

Cultural programming at the early/middle years level, has been proven to assist youth to thrive academically and in all aspects of their lives. The importance of experiential based learning and cultural teachings is evident when exploring ways in which Indigenous youth can be academically successful. The challenge to respectfully incorporate Indigenous knowledge systems, includes strategies that will support meaningful learning. In order to be culturally responsive to the needs of Indigenous youth, it is vital then that we find a way to immerse the youth on the land, through hands-on learning, and in return the young people will collectively learn about their identity, traditions, language, practices, and knowledge systems (Bartmes & Shukla, 2020; Castleden, et al., 2012; Okpalauwaekwe, et al., 2022; Reed & Diver, 2023). Early/middle years leveled cultural programming has quickly taken notice by the mainstream education system as a means to effectively teach Indigenous students about who they are, while giving them the opportunity to be successful academically, while also thriving in the knowledge of their ancestor's food systems. Early/middle years leveled learning has always been a challenge in itself for Indigenous students. Through imbedding cultural learning in early/middle years programs, the overall effectiveness can be considered groundbreaking. When culturally relevant

curriculum is implemented then the students can begin to apply their own learning, based on who they are as Anishinaabe people, and how they can contribute as citizens of society, working towards a sustainable future, and also carry traditional knowledge at the same time.

The emphasis on cultural programming at the early/middle years level, has rapidly increased over the years, and is becoming more widespread throughout Manitoba and Canada, as a way to create Elder-youth connection, and reclaim Indigenous culture, traditions, customs and practices (Fast, et al., 2021; Sutherland, 2005; Sutherland & Swayze, 2012). Cultural programming can be understood to greatly assist Indigenous youth to be able to relate to their own realities as a distinct group of people, but also as a collective people of humanity, which all their knowledge systems support (Hardiyanti & Ekadayanti, 2023; Scully, 2012). There is an urgent need to re-evaluate the current curriculum for Indigenous students, so that they also can be academically successful, and this is why cultural learning can be considered a pathway that bridges the gap in educational programming. With the long-term planning strategies to implement and create more educational opportunities that are culturally-based, Indigenous students will be able to overcome some barriers to education, and this will allow them to focus on learning about their local traditional knowledge systems (Ambler, 1998; Robidoux, et al., 2023). Cultural programming being implemented at the early/middle level can contribute to the fostering success of Indigenous students. This type of culturally relevant learning, at this level, will ensure that the students are given a quality education through hands-on, experiential-based learning, which supports their pedagogies and way of life that has sustained their communities since the beginning of time.

Summary of Literature Review

After review of the literature relevant to the study and proposed research questions, the three themes that emerged were, 1) Experiences of Land Based Education Programming in Manitoba, 2) Indigenous Food Systems, 3) Curricular Strategies and Innovations are all progressive themes. The key findings for each of the themes, based on the review above, are 1) The need to implement Indigenous pedagogies in land-based programming 2) the strategies to revitalizing Anishinaabe knowledge systems, and 3) Developing relevant Indigenous-food focused curriculum at the early/middle years level.

In order to explore and analyze how Indigenous food-focused curriculum can bridge the gap in education and create a resurgence for youth, it is vital to consider how the proposed research intends to address three vital gaps in the literature:

1) The first gap is how there is a need to move towards more community-based and led initiatives to land-based education, particularly for local Indigenous community members and youth reclaiming their way of life by learning off the land. The current strategies being initiated should be evaluated and analyzed more effectively, in order for land-based programming to be seen as an equal or alternative partnership to the conventional education system, in order for the youth to connect to their cultural identity sustainable future (Ball, 2004; Cornthassel & Bryce, 2012; Heid, et al., 2022; Pickering, et al., 2010). This research is important to analyze what innovative approaches have been successful and what pedagogical strategies can be tailored to design and develop a model for Indigenous-food focused curriculum at an early/middle year level in LPFN. The initiatives and strategies' that have been utilized in Manitoba and Canada have been examined, for an in depth look at innovative approaches to learning off the land the local knowledge systems.

2) The second gap that will be looked at is directly related to Indigenous food systems, but also the need to revitalize the Indigenous food systems, associated knowledge's and languages through learning off the land. The reason there is a clear gap, is due to Indigenous language being looked at as a strategy, rather than as an outcome (Mckinley & Smith, 2019). Therefore, curriculum development in this area is needed to revitalize the local language and Indigenous knowledge systems i.e. Indigenous food systems (Absolon, 2010; Graham, 2005; Styres, 2011). Although Indigenous food systems is the big idea here, it is not separate from language, and land-based initiatives, which have recently been put in place at early/middle years levels in Manitoba and other parts of Canada, because they are proving to be successful in meeting the cultural, pedagogical and academic needs of Indigenous students (Lansing, et al., 2023; O'Gorman & Pandey, 2015; NMFCC, 2021). LPFN currently has a limited number of Anishinaabemowin speakers, who are reaching out to the communities call to action, which involves the revitalization of the local language at the early/middle years level, with the incorporation of land-based learning and Indigenous food systems intertwined, to meets the students success in reclaiming their language through intergenerational transmission of

knowledge.

3) The third gap is the current curriculum being taught across Manitoba and Canada needs to integrate Indigenous paradigms, practices, and use of local Indigenous languages, in order for Indigenous students to be successful in their traditional knowledge systems, academically and in all aspects of life, and this is a clear gap. When approaches to Indigenous cultural revitalization and intergenerational transmission of knowledge is discussed primarily in terms of strategies, theories, and rights, they tend to overlook the everyday practices of acts of resurgence (Corntassel & Bryce, 2012; Loukes, 2023; Pickering, et al., 2010; Wildcat, 2014). Learning about Indigenous food systems at an early/middle years level, off the land, will prove successful across Manitoba if it is made accessible for Indigenous youth because this type of cultural resurgence is what will inevitably sustain who they are as a distinct people, who carry a deep connection to their territory and knowledge systems. This strongly indicates the need to address the development and design of Indigenous food-focused curriculum model of learning for LPFN.

The literature also gave emphasis on the study objective, which is to design a participatory food- focused, land-based education model, that will assist in the cultural revitalization of the Anishinaabe food systems for the LPFN community through hands on activities and practices that include, gardening, hunting, trapping, fishing, harvesting cooking and learning outdoors. It is understood that the Anishinaabe people believe that they are the land, and that they belong to the land. Therefore, by engaging in these strategies and innovative projects, we are moving closer towards a movement that for once, includes Indigenous youth, the Elders, and the whole community, to be part of the solution to helping sustain the environment through returning to their cultural traditions that includes studying food-focused curriculum at an earl/middle years level. Finally, it is vital that the Elders and knowledge keepers be at the center of implementing the curricular initiatives, and innovations related to Anishinaabe food systems.

The community of LPFN has called for support and action in gaining assistance to create food-focused curriculum through community voices and perspectives on Indigenous food knowledge, that will compliment and co-exist with their land-based education program that they are currently coordinating all year round. Communities such as LPFN, represent one of many Indigenous communities who wish to be part of the solution in terms of reviving, restoring, and reclaiming their Indigenous food systems, culture, practices and way of life. Conducting this

study in the Anishinabe community of LPFN will provide valuable alternatives that will allow the youth to be successful in their own knowledge systems. They will also be able to flourish socially, academically, spiritually, and culturally, and in all aspects of life. Therefore, land-based education programming, with a specific focus on Indigenous food systems, can be seen as an innovative curriculum that is dependent on community participation and through the involvement of knowledge keepers and Elders.

The LPFN community knowledge keepers, Elders, hunters and youth want to create more opportunities to learn hands-on and through experiential-based learning approaches that take place in nature, through outdoor activities, and where they can become knowledgeable in their Indigenous food systems. Another advantage to developing this type of food focused curriculum model, is that the youth, Elders, and community members will be empowered to express their voices in the design and delivery of a land-based learning model that will help them and their communities in restoration of their cultural identity, customs, and traditions.

Chapter 3: Research Design, Methods, and Approaches

By building on an Indigenous research paradigm and protocols (Chilisa, 2012; Windchief & San Pedro, 2019), I have used a qualitative case study approach (Yin, 2018) to actively seek community voice and participation in all stages of the research. Seeking the community's input and through developing meaningful relationships, a pathway will be created to developing a case study, which will also be utilized in this research, as it clearly indicates the best approach when working directly with the community. Due to the COVID-19 pandemic, a different approach in case study to collaborate and collect is consistent of a virtual environment was taken for precautions, however it was deemed necessary by the participants and lead Elder to attend the interviews and dialogues in person, which is how all 9 of the interviews took place. The participants were given a consent form in which followed their protocols of reciprocity, and they filled it out and signed for their consent in the study. When the participants frequencies were examined, the data analysis results were produced for the case study. The lead Elder was guiding the research through regular meetings and mentorship, for the desired outcomes of this study.

This case study consisted of frequent interactions through regular community visits and conversational interviews (some virtual) as part of community-based Indigenous research protocols and participant observation (anecdotal note taking). Note taking helped in the assistance of assessment and evaluation in direct relation to the outdoor activities surrounding hunting, trapping, fishing, harvesting medicine picking for this project. These discussions were collaborated through Microsoft Teams for more thorough result and analysis. This study was designed to engage the community and is thought to be the best approach to having the participants share oral teachings, narratives, and stories of experiences with Anishinaabe food systems. After conducting an in-depth review of literature and through constant communication with the community to analyze and synthesize lessons learned from Indigenous-food focused land-based initiatives, team meeting was organized with the lead Elder, that were land-based activities, associated with Indigenous food systems and land-based education. These activities worked to generate ideas, that consolidated the goal of designing a LPFN food-focused curriculum model. As this study examined the need for Elder-Youth connection for land-based initiatives, this study can guide the future recommendations of designing and implementing lessons and units that will accompany the community input, and for some regular follow-up sessions with the Elders, knowledge keepers and community participants, there will be informal and semi-structured interviews (Creswell &

Creswell, 2018). The interviews were with seven local Elders/knowledge keepers, two representatives from LPFN school, an administrator and an educator, to explore the possibility of developing and implementing an early/middle years level curriculum with a focus on Indigenous-food systems in LPFN. Although there were ongoing Covid-19 precautions that have been taken into consideration the last couple of years, this research was still done one on one and in person and in the LPFN community. The lead Elder from LPFN has made massive contributions and was connected during all stages of the research.

3.1 Building Blocks of Research Design

By building on Indigenous research paradigms, this qualitative case study approach engaged the community, their voices, and knowledge, through strongly encouraging participation in all stages of the research. The Anishinaabe pedagogies and protocols played a vital role in the design of this study and how it is culturally relevant to the community of LPFN. This research is based on the commitment and establishment of the meaningful relationships that Dr. Shailesh Shukla from University of Winnipeg has developed with the community of LPFN. Another ally is Shirley Thompson has contributed to this research through mentorship, and who is also part of larger research project on Indigenous food systems through the Mino-Bimadiiziwin project at University of Manitoba, on which my supervisor Dr. Shailesh Shukla is a co-PI. The first aspect of the research design was to connect with the community participants and review the needs of potential audiences for the case study (Creswell & Creswell, 2018; Yin, 2018). The community was invited to meet with the lead Elder in person in their chosen environment and before the interview we had some dialogue around the questions being asked and about how this project would begin and what the outcomes would be, in terms of designing a food-focused curriculum model.

After establishing a relationship with an LPFN community Elder, through Dr. Shailesh Shukla's endorsement, the researcher introduced the thesis which presented a community based concepts were discussed in dialogue, around what the community needs to further design and develop in relation to their land-based programming. The researcher has also started to develop relationship through conversation with the LPFN community members through the Teams application.

After more contact was made with LPFN community members in 2021-2022, interviews were arranged at the individual's convenience and they were also given an honorarium, tobacco, and gift, for their valuable time and oral teachings as a form of reciprocity and Anishinaabe protocol. The project started immediately following the approval of the research, in person meetings were predominantly utilized, which made for a closer assessment and therefore more successful observations. The research continued year-round, when the hunting, trapping, and harvesting became busier and more plentiful in order to encompass more knowledge around food and land-based initiatives. Also, more time spent in LPFN was ideal, where one-on-one interactions were more comfortable for the participants and lead Elder.

One of the key approaches that the researcher utilized, was to collect all the data through the use of the Microsoft Office 365 applications, after conducting all the interviews, presenting, as well as transcribing the interviews. All the data was collected, through examining documents, interviewing participants, meetings and by observation of the land-based Indigenous knowledge transmission taking place with the youth, on the land. Necessary and helpful protocols were created with the participants and used as an instrument for recording data (Creswell & Creswell, 2018; Yin, 2018). Some protocols included, smudging, holding a feather while talking, the offering of tobacco, sharing food and others. This research was sensitively conducted in relation to what is shared, and how it was compiled, meaning it was not to be used if the participants changed their minds about sharing their interview, knowledge etc. Therefore, open ended forms of data were conducted, where the participants could share freely and without constraints (Creswell & Creswell, 2018). The researcher reviewed all the data collected through office 365, made sense of it, consulted the community, Elders, educators, and administrators for validation, by asking for their assistance to give their input and reach a consensus, before moving forward. The data is organized into codes and themes for a thorough approach.

3.2 Community and Participant Selection

The community of LPFN was selected for two reasons: 1) it represents a rural and Manitoba Indigenous community, whose perspectives and voices are not often seen in scholarly research; 2) Research supervisor, Dr. Shukla, is in close contact with LPFN knowledge keepers on various other education related projects, he is also a co-PI on the Mino Bimadiziwin Project,

in partnership with Shirley Thompson, who established meaningful additional funding for this research.

The participants in this research project are community members of LPFN who are directly involved in land-based education, curriculum and knowledgeable in their Anishinaabe food systems. The participants were asked to share and identify their knowledge around Anishinaabe food systems and how these may have changed over time. The participants' interviewed were asked to share anything they think is important but that has not been asked, and these comments were given careful observation to ensure the narrative, story, and teachings are being shared with respect and in support of their cultural protocols. As the researcher, I became involved in building a relationship with the community of LPFN and encouraged the participants to explore their personal views on the themes of Indigenous food systems and the design, development and implementation of how this innovative food-focused curriculum model will look, for the students at LPFN's land-based education program. The wisest approach is through participatory engagement, which will enable community inclusion in all phases of program planning, delivery, and refinement (Ball & Janyst, 2008; Castleden, et al., 2012; Grimwood, et al., 2012; Hibbard, 2022). This research was dependent on using a community-based approach, because this method is best suited for educating the students about their traditional food systems through role modelling reciprocity and by doing. Therefore, the community was fundamental to the success of the research, and they also directly benefited by immersing themselves in the learning process of how to revitalize and imbed their knowledges systems in their current curriculum. This approach is necessary to support the needs and goals to build on land-based education and their relationship with the land (Ball, 2004; Galway, et al., 2022; Pickering, et al., 2010). The community of LPFN and the participation selection of Elders, educators, students' knowledge keepers and administrators from the University of Winnipeg, were enriched by the experience being part of groundbreaking work about their cultural traditions and knowledge systems.

3.3 Data Collection Procedures

All the data that emerged from the interviews was recorded when utilizing and carefully transcribed and the lead Elder was also partnered with the researcher, to evaluate and assist in identifying and categorizing the emergent themes, which arose with the participants (Creswell & Creswell, 2018). The discussions that were encouraged were centered around Indigenous food

systems and innovative curriculum development, and how to best meet the needs of the students in terms of how to implement lessons that will be impactful, healing, and a way forward, while practicing their traditions and learning their knowledge systems. The themes spoke of the importance of food-focused curriculum, land-based education, and a resurgence of Indigenous food systems in the local community of LPFN. Finally, once all the information was collected, compiled and documented: the lead Elder was given a copy of all the references that were obtained in regard to essential components of the research, such as how the lessons should look, in order to capture the relevance of the LPFN community thinking seven generations ahead. The LPFN community's understanding of Indigenous food systems is deepened by this research. I was able to document as many of the proceedings of the research as possible through recording, videos, photos, emails, anecdotal notes, and through links on Office 365. The participants also had a clear procedure to follow through an outline of the research questions and overview of the project. The research that was collected was manually evaluated for the results, and this is how the data will be collected. See methods table below:

Table 1

| Research Questions | Methods | Sources |
|--|---|---|
| Lessons learned from Land based education in Manitoba | Literature review. Method is inquiry based using Office 365. Method employs the need for cultural reclamation. Revitalization of Indigenous food systems. | Secondary sources such as reference books, review articles, journals and other scholarly books and works that can be utilized for reference. |
| Design of Community Participation Long Plains First Nation | Semi-structured interviews; in person in their chosen environment in LPFN. Seven knowledge keepers/Elders and two Education administrators (semi-structured interviews) | Oral history, circles (Zoom calls), meetings (focus meetings) and presentations. Interviews (audio recording). Community based fieldwork. In person, internet communication on email. |
| Generate recommendations for Indigenous-food focused land-based pedagogical curriculum for educational institutions at a early/middle years level in Canada. | Seven knowledge keepers/ Elders and two Education administrators (semi-structured interviews) | Open ended responses, stories of personal reflections, anecdotal notes and observation, recorded interview conversations, and community engagement to ensure model is relevant to LPFN. |

3.4 Data analysis/validity/reliability

After conducting the study, I ensured that the data being gathered was analyzed immediately after, and on a continuous basis. It was vital that the lead Elder was involved in the data analysis in all stages of the research to ensure validity and reliability, and due to a close connection with the band and school this was made possible, and through the community leaders and Elders who are closely involved in such projects. This research consisted of interviews, talking circles and observation of activities where LPFN learns about Indigenous food systems (hunting, fishing, harvesting etc.). The observation was supported by audio recording, office 365, and anecdotal note taking as well, in relation to site visits to LPFN's, hunting, trapping, fishing, harvesting, gardening and medicine picking activities. From the very outset it ensured that guidance and mentorship from the local Elder were received throughout the research and everything is reflective of the voices of the community and that it is not being documented without the proper values, customs and protocols of the Anishinabe people of LPFN.

All research materials that I gathered was thoroughly checked for accuracy, and the main methods were utilized is through interviews with seven Elders/knowledge holders, and two Educator/administrators. Other methods included, meetings, telephone dialogue and through observation of the outdoor activities surrounding LPFN's food systems. The interviews were all done in person, one on one interactions in LPFN community. This research is focused on the validity through a post-colonial Indigenous perspective (Chilisa, 2012). This holistic perspective is aligned with LPFN's cultural protocols and nicely compliments the practices needed to do this important work. Indigenous methodologies naturally follow cultural protocols, and can be considered holistic, as well as relational, to Indigenous knowledge systems and paradigms (Absolon, 2011). As a lifelong learner, I consider myself an asset to this research, as I encompass background knowledge in Anishinaabe knowledge systems, which allows me a deeper Indigenous worldview as I am immersed in my Indigenous community, culture, and ways of knowing, making me most qualified to gather the data, collect the data, and findings, in order to design and develop food-focused curriculum for rural Indigenous communities in Canada, such as LPFN. The data was shared with the community participants through email, paper copy, or through the mail depending on their preferences.

One of the challenges and modifications encountered during the interviews conducted within the LPFN community encompassed various aspects, including the impact of the COVID- 19 pandemic, community restrictions, and some unfamiliarity of when interviews would take place with the Elders and community members. It was planned for virtual interview platforms, but the community insisted on in person interviews, which was honored. The interviews were conducted in May, July, and December of 2021. Furthermore, the final interviews were conducted in May 2022. I had the opportunity to experience firsthand the invaluable mentorship provided by David Daniels, who served as the lead Elder of this project. David's mentorship and guidance for my master's research has had a profound impact on me, completely shifting my way of thinking and reshaping my mindset. In addition to his academic support, David has also embraced me as his little sister, recognizing me as a stand-in for his late sister, Wanda. Through his guidance, David has challenged me to embody my identity as an Anishinaabe woman, emphasizing the importance of serving the Creator and understanding the inherent heart work involved. He has also taught me about the power of blood memory and our ability to change our DNA and rewrite our narrative.

3.5 Ethical Issues and Role of Researcher

A formal ethics approval was obtained for this project from the University of Winnipeg's Ethics approval board after seeking approval proposal to LPFN Chief and Council. As the researcher I had already begun to connect with the LPFN community before starting the research and was honored to meet with the Chief and some council members in August 2020. The ethical considerations on use of various tools and methods of data collection including sensitivity to community consents in data collection were followed. In order to develop an in depth understanding of the sensitivities that Indigenous communities have with protocols, it made sense then to conduct community-based research that included the lead Elder during all stages of the research. The Elder, David Daniels, was included in all stages, by being asked to meet for guidance and mentorship and by sharing honestly in the about the study, as well as through being encouraging to email or call the researcher personally to discuss any concerns or ideas that will assist in the progress of the research. The results were in this way consolidated by the community (Smylie, et al., 2009) before moving forward in the research. The qualitative methods to work closely with LPFN supports the community-based

approach in a way that that supports ethical protocols in the design of the food-focused curriculum learning model. These findings support the hypothesis that understanding local Indigenous processes of knowledge creation, dissemination, and utilization is a necessary prerequisite to effective knowledge translation in Indigenous contexts. This project is conceived through a specific focus on Indigenous food systems and is guided by LPFN's commitment, involvement and engagement in all aspects of the research because they are the knowledge keepers who can speak on behalf of their community, the ones who are calling for this type of relevant curriculum and they are the guides that will ensure the success of the food-focused curriculum for a better future for their coming generations.

In relation to any issue that may have been raised that I was unsure of or had questions about, it was essential for me to debrief, consult, and negotiate with the community (lead Elder), before moving forward with the gathering of data, collecting of data and findings. The importance of this research will be determined through the commitment and responsibility to work collaboratively with the University of Winnipeg and LPFN.

Furthermore, this research met the ethical protocols of the University of Winnipeg, while at the same time I want to acknowledge the fundamental role that the community participants played in the study and will not claim ownership of the knowledge shared (Absolon, 2011). It is essential to honor the sharing of information in a reciprocal way which are ethically sound from an Indigenous research paradigm, which is to: 1) offer tobacco to the participant in order to receive the knowledge being shared, 2) participate in all ceremonies and any cultural events in support of the research and knowledge being shared (Kovach, 2012), 3) focus specifically on the sharing of Indigenous food systems (hunting, trapping, fishing, harvesting and medicine picking).

3.6 Self-positioning

This study represents Indigenous research for three reasons that are supportive in Indigenous paradigm: 1) oral teachings shared through an Indigenous narrative 2) full participation in ceremonies and following of cultural protocols 3) to experience hands on, the roles and responsibilities that consist of learning about Indigenous food systems (hunting, trapping, fishing, harvesting, and medicine picking).

Conducting this research guided my own personal journey, through receiving sacred knowledge because these ancient beliefs systems are not a thing of the past, but rather a tool to find a better way forward for Indigenous students in LPFN. My research supports academia, but also many other aspects of life, because it embodies the Indigenous pedagogies, values, teachings, and paradigms of my Anishinaabe ancestors and the first people of this land. Due to my enriched past experiences as an Anishinaabe woman I was able to bridge current research, between Indigenous knowledge systems and academia. My experience consists of being an educator, working for Indigenous organizations, and educational institutions, as well as being an Indigenous woman, traditional singer, a participant and helper in ceremonies, and cultural events. I have a personal interest in researching land-based programs with a specific focus on Indigenous food systems because I have been a participant in a land-based program in high-school, as well as facilitated an Indigenous land-based language camp and assisted in facilitating TRC training in the public school divisions. As the researcher, I believe I was the ideal candidate to conduct this research, as I am also from the Anishinaabe nation and am a woodlands Anishinaabe, like the community of LPFN. She also has knowledge of her history, she also belongs to a band, understands her own territories history, and identity, and has frequently visited many reserves, as well as has many relatives and alliances that are also Indigenous from various nations within Canada and the United States. The topic of study is familiar to the researcher because she has spent the last 20 years learning her language through song, attending ceremonies and participating in cultural and land-based events, and this has been her process to decolonize and reclaim her identity as an Anishinaabe woman, mother, daughter, sister, relative, friend and ally.

This research contributes to my innate responsibility to my people, but also entails being a life-long learner, because we all have much to learn from Indigenous knowledge systems, Elders, knowledge keepers and the land that sustains all living things. This research fully supports and identifies as Indigenous research due to the manner in which it is conducted; respectfully, reciprocally, and according to Indigenous cultural protocols (e.g. give gift of tobacco, speak local language, conduct on the land).

Chapter 4: Outcomes of Land-based Learning

LPFN's Participant's voices

The purpose of this chapter is to discuss the most important outcomes of land-based learning, with a focus on Indigenous food systems as experienced by the participants from Long Plain First Nation community, Manitoba. This chapter highlights the importance of land-based learning for the preservation of traditional knowledge and cultural practices, as well as the importance of land-based learning for the health and wellbeing of LPFN. All ten participants identified five main themes, which included:

- Rediscovering Indigenous knowledge
- Land-based Learning
- Food Security and Wellbeing
- Roles and Responsibilities
- Local support

The chapter also discusses the participants' experience within their Indigenous community of LPFN in relation to rediscovering Indigenous knowledge, maintaining land-based learning opportunities, food security, well-being, and roles and responsibilities. Overall, this chapter provides an important insight into the outcomes of land-based learning for LPFN communities as perceived by the participants.

For organization of the data and to identify the key themes, the interview transcript underwent a thorough analysis. First an MDP alumna (Masters in Developmental Practice) alumna, and my advisor (Dr. Shailesh Shukla) independently reviewed the interview transcripts and assign codes. We all read texts of response, identified themes and then discussed and finalized the category labels for the codes. Excel was used to organize the data and frequency of codes were determined based on number of times it was mentioned in the interview for a given question. This procedure though lengthy, helped us in achieving more than 85 % inter-codal reliability. The following table demonstrates the number of interviewees that mentioned the themes under review, these themes are an indication of the number of quotes which coincided into each theme, as well as and the percentage of interviews which contained each theme.

Table 2 Frequency of Themes Related to Land-based Outcomes in LPFN

| Outcomes perceived by participants | # Quotes | # Interviews |
|------------------------------------|----------|--------------|
| Rediscovering Indigenous knowledge | 31 | 7 |
| Land-based Learning | 22 | 8 |
| Food Security and Well-being | 18 | 9 |
| Roles and responsibilities | 17 | 7 |
| Local Support | 12 | 5 |

4.1 Rediscovering Indigenous Knowledge

This was the most cited theme by participants, which includes under this theme. The sub-themes for this category represent a variety of ways in which participants reported on how Indigenous knowledges of local food systems including land, are being rediscovered by them. These include 1) Intergenerational Transmission; 2) Generational healings; 3) Women’s medicine’s; 4) Healing formula or practice; 5) Combining modern and traditional plant knowledge.

The most common sub-themes of intergenerational transmission include knowledge/learning of medicinal plants, oral teaching in action, transmission of traditional knowledge, knowledgeable sharing of teachings, and about helping anyone who asks.

4.1.1 Intergenerational Transmission

Intergenerational transmission of knowledge is a vital piece of how LPFN passes down traditional food related knowledge and beliefs from one generation to the next. LPFN Elders want to share their wisdom and experiences with younger generations, so the knowledge and traditions can be carried forward into the future of the community (DD, Personal Communication, May 2022).

The participants in this study have learned this knowledge that is passed down from grandparents to younger generations, and that it is important to ensure that this knowledge is preserved. This is especially important in the context of the Seventh Generation prophecy and teachings, which emphasizes the importance of considering the effects of actions on the future generations yet to come. The seventh generation are taking a thoughtful approach to the future

generations, by considering what is best for the land. This is a core principle of Indigenous people, and they strive to ensure that their actions today will benefit the generations to come (Bryer, 2023; Matthews, 2011; Pimachiowin, 2012; Wheaton, 2000). By passing on knowledge from one generation to the next, LPFN knowledge keepers and community leaders, can ensure that their food knowledge systems are preserved. For example, one participant mentioned: *“Because of the knowledge that I learned in the past. I’m seeing in modern society that to combine we need to relearn or reimagine our future... I sort of I feel like an Elder in training...but I’m using my Elderly, oldness to kind of take advantage of it to help the younger generation who are very educated and also living with the prophecy of the seventh generation, that we are going to come back and we are going to be stronger than the past generations, so this is part of one of my missions, is to also revitalize that seventh prophecy of that seventh generation and that’s happening right now”* (LPFN5, July 2021).

Being part of the momentum of the seventh prophecy of the Seventh Generation is vital, to ensure the future sustainability of the children to come. Indigenous people are the ecological solution and this prophecy speaks to the need to create a sustainable future by restoring balance to Mother earth and respecting all living things. LPFN has a remarkable way of passing on knowledge about medicines, which involves learning through a hands-on approach, based on their food knowledge systems and through elder or knowledge keeper mentorship. This approach helps to ensure that knowledge is transmitted from one generation to the next.

The overall outcomes to land-based learning can include viable solutions to the restoration of LPFN’s Indigenous food systems. And in the meanwhile, it is essential to recognize the importance of how continuing to engage in food related knowledge in LPFN is also directly addressing social and environmental issues, thus creating a better future for their community. As citizens, Indigenous communities can all contribute to this effort by being informed and actively participating in initiatives that promote positive movements (McNally, 2004; Morton, et al., 2020; Skinner, 2013; Thompson, et al., 2014). By learning their food knowledge systems, through intergenerational transmission of knowledge, LPFN community can pass on their experiences and knowledge systems to the next generation, ensuring that their food practices are preserved and that their knowledge is used to create a sustainable future.

Generational healing was the second most common sub-theme by participants, which includes under this theme are: laughter is medicine, healing moments, revitalizing mission for 7th generation, urgent work, reimagining our future, prioritizing youth wellness, and healing trauma work.

4.1.2 *Generational healing*

Indigenous generational healing work is a powerful form of healing that works to restore balance and harmony to the individual, the family, and the community (González-Hidalgo, et al., 2022). It seeks to address the intergenerational trauma that has been experienced by Indigenous people, such as LPFN members, and to restore the connection with their identity, language, traditions, and food practices.

The participants in the study have learned that laughter is a powerful medicine, capable of healing many moments in life. Also, it has become evident that this is the responsibility of the current generation to revitalize the seventh prophecy work, as it is a necessary and opportune time for them to reimagine their future and prioritizing Indigenous youths' wellness. Indigenous members in LPFN are striving to heal from any and all traumas', as it is essential to their overall well-being. Through this study, the participants have shared the importance of being immersed in their spirituality in order to heal and how this lifestyle can bring them closer to a healthier future. As mentioned by one participant: *“It’s harder to mend yourself spiritually, to mend yourself emotionally. And who wants to do that, it takes a person with some good junction to want to do it for themselves but do it for their children...I had a lot of pain and trauma in my life, even growing up, even recently trauma. But you have to reach back to your teachings and your culture to move forward. There’s a lot of opportunities, when I could of fell back into that whole thing, but I just couldn’t do it, I love myself now, I love myself”* (LPFN4, August 2020).

To connect to their identity, sense of belonging and who they are as Anishinaabe people, it is imperative that Indigenous youth in LPFN, work towards reimagining their future, which directly relates to learning about traditional medicines, dealing with trauma, and intergenerational healing. Communities such as LPFN are capable of healing and it is their responsibility to endeavor on their own journey of self-discovery, which will ultimately lead them to their culture and identity, but somehow this knowledge always relates back to food

because this is so essential to life as an Indigenous person. This heart work is a powerful reminder of the strength and resilience of Indigenous people, and the importance of understanding and embracing methods to move forward in communities in relation to food focused initiative's that also promote health, and healing (McEachern, et al., 2022). This can be seen as an opportunity to create a brighter future for the community of LPFN, and to ensure that their individual and collective healing is a priority.

Generational healing is an essential part of land-based outcomes for LPFN community. Studies and findings have shown that cultural connection, is a key component to who they are as Anishinaabe people and a big portion of this relates to their relationship to the land, and therefore food practices. By engaging in activities that promote healing and reconnection with the land, Indigenous people can strengthen their relationship with the land and ensure that their culture and traditions are passed down to future generations (Ball, 2004; Galway, et al., 2022; Pickering, et al., 2010). This is why it is critical to emphasize that generational healing is necessary to preserving and strengthening the connection between LPFN community and ensure their land- based learning initiatives are successful.

4.1.3 Women's Medicine

Indigenous women have long been the stewards of medicinal knowledge, using plants and herbs to heal and nourish their communities (Settee & Shukla 2020). This knowledge has been passed down through generations in LPFN and is an invaluable resource for modern medicine.

Women's medicine was the third cited sub-theme by participants, which includes following categories: knowledge of women's medicine, life giver teachings, matriarch society, reclaiming traditional parenting and role modelling parental responsibilities. Women's medicine encompasses a wide range of traditional practices, from herbal remedies to spiritual healing, and it is a vital part of preserving and strengthening Indigenous cultures, including food and land-based activities. The knowledge and wisdom held by women is invaluable, and it is essential for the future of LPFN community to prosper, in terms of how to meet land-based outcomes through learning women's medicine.

Medicine women from LPFN have used medicinal properties to treat a variety of ailments, from minor skin irritations to serious illnesses since time immemorial. This knowledge is rooted in LPFN's belief system and daily practices for the Elders and participants interviewed and provides a unique perspective on Anishinaabe women's medicines. The importance of women's medicinal knowledge cannot be understated for LPFN community, as it provides insight into the healing power of plants and herbs and can help them to better understand the connection of women's medicines to food and their identity. The participants in this study have voiced that women's medicine is essential to the future of LPFN's future progression specifically focused on food. Women are the original knowledge keepers and matriarchs of Indigenous societies, and they have the power to lead us into the future with their medicines (Settee & Shukla 2020). By recognizing and honoring the power of women's medicine, we can ensure that LPFN's women's medicine knowledge will continue to thrive. For example, one participant mentioned: *"One of the things I remember is the woman medicine, when a woman is bleeding a lot it has a after they give birth to baby, this medicine was given to them for four days and there are only certain ways that you pick it in the afternoon, and there's only certain ways you make this medicine, you don't just make it so it boils down, there's certain ways that you do it. And then she taught us a teething medicine too, and then she taught us when someone has eczema, you know and then the choke cherry tree to if you have diarrhea and also the cranberry trees where used for headaches"* (LPFN6, July 2021).

For the community of LPFN, it is vital to understanding and teaching these women's medicines, we can ensure that the children, youth and those yet to be born, are able to carry on their cultural responsibilities specific to food. Women's medicines are especially important in terms of parenting and role modelling, as these teachings provide guidance and direction to the younger generations. Studies and findings have shown that reclaiming women's medicine knowledge and practices is essential to ensuring the well-being and health of Indigenous women in LPFN. It is apparent then that we understand how women are not separate in connection to food relations, responsibilities to the land, and how women's role as life givers allows her to provide to the community, by giving, living well, and maintaining the societal structures (Ferreira, 2022; Archambault & Kehoe, 2017). Therefore, women's medicine is an essential part of land-based outcomes for the community of LPFN.

4.1.4 Healing formula or practice

Plant formulas have been used for centuries by LPFN community. For LPFN, these formulas are an integral part of traditional medicine and healing practices. The Elders in LPFN utilize plant formulas to treat, and cure a variety of ailments, from physical illnesses to mental and emotional issues. These formulas LPFN utilizes are often found local and consists of a variety of berries, herbs, roots, and other plant-based ingredients, and are prepared in a specific way by the Elder, to ensure their effectiveness (Weber, 2022).

The importance of these practices lies in the fact that they are rooted in the knowledge and understanding of Mother earth and its healing properties. LPFN's plant formulas are a reminder of the power of how traditional medicines, and the importance of respecting and preserving traditional healing practices. Sharing medicinal teachings and uses, as well as remedies and cures and consist of simple ingredients. These medicinal practices are essential for LPFN, in order to preserve and pass on the teachings, and formula knowledge. For example, on participant mentioned: *"I think the first thing that comes to mind is knowledge... What is best for say a sunburn, what was best for a cut, bee stings, so we learnt all that. I still remember, I didn't forget those ones. The availability of having access to this medicine, knowing how to use it and also follow up with teachings"* (LPFN2, June 2021).

LPFN is working to ensure that their community members have access to the resources they need to continue to practice their traditional healing methods. Therefore, it is evident then that traditional knowledge keepers are willing to share about healing practices with the coming generations, to ensure the teachings of their people continue to be incorporated through traditional customs and protocols related to their ways of knowing (Iseke, 2013) Additionally, it is vital to create opportunities for LPFN youth to learn about their traditional healing practices, and to provide them with the tools and support they need to accomplish this, and finally, it also essential to create learning spaces and programs that allow LPFN Elders' and knowledge keepers to share their knowledge and experiences with each other, so that they can pass on their traditional healing practices to future generations.

4.1.5 Combining Modern and Traditional Knowledge

The fifth and final cited sub-theme by participants under the main theme discussed; this theme stood alone: combining modern and traditional knowledge. It is vital to include both a connection between a formal education as well as an education from the Elders' who carry traditional knowledge. This combination of information will ensure the students have an opportunity to identify with their language, territory and land, as well as become contributing citizens. (Demssie, et al., 2020; Corwin, 2016).

In today's system is also essential to include a formal education so that youth can be fluid in society and gain opportunities and push the envelope on what is important in their community. Combining modern and traditional knowledge that is relevant, will enhance how the future generations can sustain themselves moving forward. And therefore, create contributing and competent citizens of society, who also know who they are. Such momentum is needed for LPFN students to reach successful land based outcomes. For example, one participant mentioned: *"I know when I was younger, I learned how to cook and how to sew and all that kind of stuff and just by watching my parents. I didn't really get into hunting. I did hunt a bit, but I didn't really get into hunting, they did. I went this route to the education part. But with land based, that's what should be included"* (LPFN9, May 2022).

Combining modern academia knowledge with traditional knowledge is an important step in understanding LPFN's cultural identity and how they are connected and related to all living things. And by combining these two diverse knowledge systems, we can gain a more comprehensive understanding of both world views, as well as how we can use these knowledge systems to benefit and educate LPFN youth on the land. Traditional knowledge can provide insight into LPFN's history, identity, and cultural practices, while modern knowledge can provide a more scientific understanding of Mother earth's elements related to the curricular outcomes. By combining these two, LPFN community can widen their lens and develop their worldview, while still utilizing their traditional practices that actively work to preserve and restore traditional knowledge systems.

As the researcher, I felt that it was important to include a theme that spoke to the importance of learning from the Elders, on the land, as well as how through the formal education

this can be immersed together effectively. This theme is essential to understanding how we can maneuver in both worlds. Learning on the land is an important part of LPFN's cultural identity and knowledge base, and it is important to recognize and include in this study. By including this theme, it allows one to envision how the value of learning in both traditional and modern ways to bridge the gap between Indigenous and non-Indigenous knowledge and understanding for best land-based outcomes.

This theme is essential to creating a more equitable and inclusive society that respects and honors Indigenous knowledge systems within formal education institutions. This will give Indigenous children and youth the tools to be successful and promote purposeful living, as well as academic success. LPFN's Elders and knowledge keepers understand the importance of collective work amongst their people and with non-Indigenous people, in terms of traditional knowledge and western approaches to learning. There are barriers, but also more possibilities here. A recommendation is to incorporate the implementation of culturally competent programming, that clearly shows a relationship with humanity and all people, to bring balance and harmony to future generations. This mutually respectable environment will create a clear dialogue amongst the collaborators who are promoting cultural awareness and unity, and any challenges can be overcome (Redvers & Blondin, 2020; Snow & Obed, 2022). Creating Indigenous space and learning the skills from both traditional and modern sources will help ensure that LPFN youth are able to thrive in their community, for generations.

4.2 Land-based Learning

The second cited theme by participants in land-based learning, the sub-themes for this category were 1) land-based education for youth; 2) enjoying the process; and 3) invest in the youth. Land-based education for youth was the most cited sub-theme by participants under the theme land-based learning. Included under this theme are related to; hands-on, experiential learning, exploratory and discovery learning, land-based activities for youth, survival skills training and land-based education.

4.2.1 Description of Land-based Education for Youth

Land-based education is an important part of youth development for LPFN. Learning on the land in a culturally oriented program, involves hands on learning activities. Land-based education for the youth encompasses traditional teachings and intergenerational knowledge transfer. Other activities and goals are implemented through an Indigenous lens and carried out in stewardship of the land (Bartmes & Shukla, 2020; Mcdonald, 2023)).

Land-based education also provides an opportunity for LPFN youth to learn about their local environment, traditional practices, and their cultural identity. Through hands-on activities, youth can gain knowledge about the land and its healing properties, as well as develop a sense of responsibility for taking care of mother earth. Land-based education in LPFN also provides youth with the opportunity to develop skills such as problem-solving, critical thinking, and communication, further developing their emotional intelligence in all areas of life. By engaging in land-based education, LPFN youth can gain a greater understanding of their purpose in the world and how to carry out their innate responsibility, of stewards of the land. As mentioned by one of the participants: *“Hands-on, respect the animal, leave the hide and legs in the bush if you know someone who wants the hides, bring the hides, respect the animal, get it home before it spoils. That’s basically what it is and teaching kids the proper way to hunt, getting them out on the land”* (LPFN7, December 2021).

Land-based education provides an exceptional opportunity for hands-on learning activities that can help LPFN youth learn about their traditional knowledge systems that have sustained them since time immemorial. Survival skills training is also an integral part of land-based education, as it helps youth to gain a deeper understanding of the local environment and how to interact and connect with it effectively. Through these land-based activities, youth can develop a better understanding of who they are, where they belong and what is their purpose, as well as gain valuable skills that will help them in their future. By providing the youth with the opportunity to learn on the land, LPFN is investing in the future of their community and the planet.

Investing in all youth through land-based activities is an important step in ensuring sustainability and progress amongst communities like LPFN, Indigenous and otherwise. By providing youth with opportunities to explore LPFN territory, language, tribe, and culture, knowledge systems,

and food practices, they are actively investing in their collective future and creating a lasting imprint. This experience is providing them with a deep connection to their cultural responsibilities, as well as a greater understanding of the how to live a good life, balancing both worlds, but with purpose and fulfillment. Other valuable skills can include, effective problem-solving and teamwork, contributing to the building of healthy relationships. Land based activities are not separate from oneself, and when the youth begin this exploration they will naturally learn about their relationship to all things through oral teachings and intergenerational knowledge sharing. Some land-based activities include following community protocols for ceremony, fires, and water, utilizing various medicines, and oral teachings made relevant for the purposes of strengthening the bond with the land and how we are all interconnected. This relationship with land-based activities will empower, support and the youth's relationship with themselves, better preparing them for the future (Corntassel & Hardbarger, 2019; Fast, et al., 2021; Simpson, 2002). Not only will youth gain a better understanding of their environment through these experiences, but they will also benefit in many other aspects of life, such as increased self-confidence, improved physical and mental health, and a stronger connection to who they areas Anishinaabe people, as well as knowledgeable in their food systems. By investing in LPFN youth, we are ensuring that their future is bright, and their community is strong.

Enjoying the process was the second cited sub-theme by participants, which includes under this theme are: joyful learning / learning with joy, enjoying the process, goal setting, work in progress, fast-paced work on the land, and trial and error.

4.2.2 The joy of land-based learning

Speaks to the experience of participating in land-based activities and enjoying the process of setting goals and seeing the progress and the final outcome. Humor and enjoyment work to increase youth engagement, awareness, and positive behavior changes. Enjoying the process develops communication skills, which effectively captures momentum for the task (Rusell & Dilion, 2023)

Land-based activities can be a very joyful experience for LPFN. Through goal setting, students can strive to reach their full potential and enjoy the process of learning. With patience, they can watch the fruition of their hard work take place and be proud of their accomplishments. This type of approach encourages youth to take pleasure in the learning process and be motivated

to reach their goals. Also, it is most ideal to begin to learn from an early age, so it can be part of who one is and shape, mold, and mentor the coming generations to carry this traditional knowledge systems. As mentioned by one participant: *“I’ve been gardening since I was five years old, my mother introduced me to gardening and I just loved gardening, I worked with it every year whether I lived in the city or the country, I’ve always had a garden. I’m planting all kinds of plants and experimenting how you plant wild plants and commercial plants you can buy from the store”* (LPFN8, May 2022).

It can be very satisfying to be able to observe the changes that take place over time, and it is also a great learning experience to go through the trial and error that can sometimes occur, for example, when your growing a garden. The challenge of working with the land and the satisfaction of achieving the goals set out is a successful land-based outcome. Something as simple as watching a seed grow from the soil can be an incredibly rewarding experience for the youth. It provides a tangible example of the power of nature and the importance of taking care of Mother earth.

It is also important for LPFN youth to have the opportunity to set goals and work towards them in a fast-paced environment, ideally on the land. Immersing themselves in land-based activities can help to foster a sense of accomplishment and pride, as well as provide a positive, life changing experience. Land-based education is designed to enhance relationships, create hands on opportunities and develop skills. Land based learning is described as an informal learning environment, where youth at risk tend to succeed and find enjoyment in this educational experience. (Mundel & Chapman, 2010). Therefore, it is important to mention how land-based initiatives can be utilized for LPFN youth to gain valuable skills and knowledge, that can be used to further their growth and development. By setting goals and working towards them in this way, LPFN youth can gain a greater sense of belonging and purpose, and thus empower them to reach their full potential in all areas of life.

Invest in the youth was the third and final cited sub-theme by participants for Land-based learning, included under this theme are: youth mentorship, youth mentorship, youth support, empower the people, invest in youth and meeting children’s mental, emotional, physical, and spiritual needs.

4.2.3 Invest in the Youth

Investing in Indigenous youth is an investment in the future. It can be beneficial to the individual, the family, the community, and future generations. By providing access to land-based education, employment opportunities, and cultural support, Indigenous youth can gain the tools and resources necessary to become successful and productive members of society. This can lead to improved economic and social well-being for the individual, the family, and the community. Investing in LPFN youth also helps to ensure that ancestral knowledge will be passed down to future generations, helping to preserve and strengthen the identity of the LPFN community (DD, Personal Communication, March 2023).

It is essential for the youth of Indigenous communities, such as LPFN to take on leadership roles and become involved in community initiatives. By doing so, they can help to advocate for land-based programming and cultural programming, which are both important for the preservation of LPFN knowledge systems. It is important to recognize the importance of the youth in the LPFN community and to provide them with the resources and support they need to become active in their communities. As one participant voiced: *“So, it’s our time. That’s kind of what I’m doing in my job, is that let the younger ones aware that we’re going to step aside and deal with our healing, attempting to bring the message out and advocating”* (LPFN5, July 2020).

In order for land-based learning initiatives to be successful they need to be supported by leadership, mentorship, guidance, empowerment, and the meeting of basic needs. Without vital components, LPFN youth may not be able to reach their full potential. It is LPFN Elders’, leaders’, and community members’ responsibility to ensure that the youth are provided with the necessary resources to succeed in all aspects of life. Engaging youth in partnership land based projects that fosters a holistic model, self-determination, a sense of belonging, and cultural identity, will surely enhance community initiatives (Bartmes & Shukla, 2020; Castleden, et al., 2012; Grimwood, et al., 2012; Okpalauwaekwe, et al., 2022; Reed & Diver, 2023). By providing mentorship, support, and empowerment, the LPFN community can ensure that their youth have the opportunity to thrive on the land. Additionally, meeting their basic needs is essential to ensure that they have the necessary foundation to reach their goals. LPFN must take the necessary steps to ensure that their youth have access to the resources they need so they can flourish into the person they are meant to be.

4.3 Food Security and Well-being

Food security and well-being was the third cited sub-theme by participants for land-based outcomes, included under this theme are: Availability/Access to Medicinal Plants, Food Security/Food Access, Healthy Lifestyle and Successful Harvest. Availability/access to medicinal plants was the most cited sub-theme by participants under the theme food security and well-being, included under this theme is; learning medicinal usage of plants/knowledge of plant usage, availability and access to medicinal plant teachings and medicine bundle carriers.

4.3.1 Availability/Access to Medicinal Plants

Medicinal plants, also known as the standing tall people, are an important part of traditional healing practices for LPFN community. Unfortunately, access to these plants is often limited due to a variety of factors, including destruction of land, over-harvesting, and cultural displacement. Despite these barriers, there are still many opportunities for the LPFN community to access medicinal plants, such as working with community, leaders, Elders' and knowledge holders, to ensure sustainable harvesting practices and access to traditional lands.

Accessing LPFN medicines is an essential part of food security, well-being, and food access. These medicines are an important source of nutrition, health, and well-being for the LPFN community. These medicines provide a variety of health benefits that are not available through western medicine approaches. They are also often more affordable and accessible than western medicines, making them a critical part of food security, well-being, and access. These medicines are intertwined in LPFN's cultural identity and preserving traditional knowledge and practices. As mentioned by one of the participants: *"I'll show you where you can pick this medicine for your kids too, for your children, your daughters. You know I'm not stingy of this medicine, because my grandmother was not stingy of it. Share it! And so those people that came and asked me for medicine never came back so they must be okay, you know"* (LPFN4, July 2021).

Accessing traditional medicines is to ensure the health and well-being of the coming generations and those that have yet to born, LPFN's medicines are a key part of their culture, and it is Anishinaabe peoples' innate responsibility to ensure that the medicines are preserved and

accessible for future generations. Each individual need to, in some way, be committed to doing a part, in ensuring that these medicines are available and accessible to those who need them.

LPFN's Medicinal plants are not separate from food security and well-being, just as their culture is meshed into each part of their identity and influences the way they move about on Mother earth. Accessibility and availability of medicinal plants are essential for the health and well-being of the LPFN community. If these plants are no longer available, it will have a negative impact on the health and well-being of the LPFN community, who depend on them. Most of the factors involved with the lack of access and availability to these medicines is directly related to the industrial development, having significantly transformed landscapes, and contributed to the increasingly severe impacts of climate change. In order to effectively address the climate crisis and navigate towards a more sustainable future, it is crucial that Indigenous communities bring awareness, by incorporating their perspectives, worldviews, and knowledge. Respecting self-determination is essential, for a comprehensive and sustainable response to the challenges everyone faces (Atleo & Boron, 2022; Gombay, 2010; Spiegelaa & Tsuji, 2019). Therefore, it is important to ensure that medicinal plants are accessible and available to Indigenous communities, such as LPFN, in order to ensure their food security and well-being.

Food security/food access was the second cited sub-theme by participants under the theme food security and well-being, included under this theme is; gardening/developing food security, self-sufficient/sustainable, prioritizing food security, and affordable food access.

4.3.2 Food Security/Food Access

LPFN has been applying traditional food practices to sustain their populations, since time immemorial. However, LPFN is also facing challenges to food security due to a variety of factors, such as land degradation, poverty, lack of identity and limited access to resources. This can lead to malnutrition and other health issues, all directly related to food security and access to food (DD, Personal Communication, January 2023).

To address these issues the LPFN community must empower their people to develop sustainable food systems that are culturally appropriate and environmentally sustainable for generation to come. This includes having access to land, resources, and education to ensure that traditional foods are available and accessible to the LPFN community, because they rely on

them. As mentioned by one of the participants: *“With the cost of food these days we need to take a look at how we need to connect back to the earth, because mother earth provides for all of us. Since time immemorial. So, the gardens that we have, is going to take a look at our food sovereignty. Being realist and harvesting our own food systems that were there, I'm taking a look a freeze dry food, hydration food, I'm looking at canning, I'm looking at the way our people preserve many days ago. Like, we didn't have wheat, we had our own flour so I'm creating ways we can create our own flour that gluten free and chemical free, so it important for me in terms of being able to teach young people how to sustain themselves in the future... they commodified our food systems and we become reliant on them so much”* (LPFN8, May 2022)

Anishinabe people have traditionally always had their own sustainable food systems, and it is vital that they return to these old ways of doing things in order to combat food insecurity. However, it is also essential to approach this with a new lens, as mentioned by the participants, such as looking into freezing, drying, and canning food to extend its shelf life and provide the necessary nutritional value to nurture LPFN's food security and well-being. Reimagining the future and looking to the ancestors for guidance, will ensure that LPFN can protect their food security and access to food.

LPFN recognizes the barriers to accessing their traditional food systems and attaining food security and well-being, while also finding solutions. It is largely due to the fact that Indigenous communities have experienced a disconnection from their land, food, and medicines due to environmental dispossession, and settler colonial state structures. This has been facilitated through both direct and indirect processes, such as political and legal authority over their nations and territories. As a result, there have been detrimental impacts on both physical and social environments (Hanemaayer & Peeter, 2022; Kuhnlein, 2015; Kuhnlein & Chan, 2000; Rudolph & McLachlan, 2013). It is imperative then, that these issues are recognized and addressed, to ensure the LPFN's well-being, food security, and access to food. Furthermore, LPFN community works towards creating opportunities to develop food-focused initiatives for their community members, that is tailored to their unique needs and circumstances. By promoting these food focused initiatives, it could very well help to improve access to healthy and culturally appropriate foods, as well as create economic opportunities for the LPFN community. These

initiatives for food access, work to ensure that the LPFN community has the resources they need to achieve food security and food sovereignty.

Healthy lifestyle was the third cited sub-theme by participants under the theme food security and well-being, included under this theme is; Healthy lifestyle, wellness and healthy eating.

4.3.3 Healthy Lifestyle

A healthier lifestyle means focusing on making healthier food choices, increasing physical activity, and reducing stress to balance. This can be achieved by incorporating traditional practices and activities into daily life, such as hunting, fishing, planting, and gathering, as well as engaging in physical activities like running, walking, and playing sports. Additionally, it is important to make time for relaxation and stress relief by engaging in land-based activities, through ceremonies, meditation, and prayer. By taking these steps, Indigenous people can work towards a healthier lifestyle and improved their overall well-being (Brinkman, et al., 2022).

LPFN's people's health is vital to their success in all aspects of life. Incorporating land-based activities and building on nutritional intake are essential steps to ensure the overall well-being of the LPFN community. To recognize the cultural identity of Anishinaabe people means to create a wellness plan that is tailored to their specific needs. By doing this, LPFN can work towards creating a healthier and more sustainable future for themselves. As mentioned by one of the participants: *"The younger ones, there's a lot of urgent issues, like homelessness, addiction issues and all the urgent stuff that we see in the big picture of alcoholism. It's kind of like we have to reimagine, I guess. We are in a transition and taking advantage of this Covid-19 too. We have a reality, like there's a lot of mental health issues also, so that's kind of a part of it. One way or another, it is part of our job as an Elderly person. Mental health is a really urgent issue too"* (LPFN 5, July 2021).

It is undeniable then that the Seventh Generation Prophecy is coming to fruition in our current times. There was a foretelling of the issues and problems that all people would face, and sadly, we are now living in a reality where these issues are present. Mother earth, the people, and all living things are in a transition period, where Anishinaabe people must look to their Elders in

order to gain knowledge of their traditional ways and to recreate their future. An overlapping message throughout this chapter is that it is completely necessary that everyone individually, as well as collectively, continue to strive for a better future, and that people honor the wisdom of their ancestors, by continuing to practice their culture, and way of life for a healthy lifestyle.

LPFN Elders' have long recognized the importance of living a lifestyle that contributed to their overall well-being. This is reflected in their holistic and traditional approaches to health, which emphasize the interconnectedness between physical, mental, emotional, and spiritual well-being. It is also important to understand how for LPFN, culture plays a vital role in the resilient living of Indigenous youth. For instance, the concept of "walking into worlds" is emphasized, highlighting their efforts to maintain overall well-being in various aspects contributing to a healthier lifestyle. While there may be risks associated with assimilating into mainstream culture, this process also shapes their identity and resilience (Heid, et al., 2022). This is why now, is the time to incorporate initiatives that focus on healthy food and well-being, so that the coming generations will be able to experience a balanced and healthy lifestyle, which is viewed as a cornerstone of the well-being of Indigenous communities, such as LPFN. By focusing on all forms of wellness (physical, mental, emotional, and spiritual), LPFN will be able to promote a sense of balance and harmony and create a strong foundation going forward.

Successful harvest was the fourth and final cited subtheme by participants under the theme food security and well-being, included under this theme is, successfully harvesting and harvesting our own food.

4.3.4 Successful Harvest

A successful harvest is one that is both plentiful and sustainable. It is a harvest that honors the traditional practices, while also providing enough resources to meet the needs of the community. It is a harvest that is respectful of the land and its resources, taking only what is needed and leaving the land in a better condition than before. A successful harvest is one that is celebrated, with the community coming together to share in the bounty and joy of the harvest.

Learning about LPFN knowledge systems is the key component to achieving a successful harvest. LPFN's knowledge systems provide invaluable insight into the best practices for cultivating crops, as they have been developed and carry hundreds of centuries of experience and

observation. By understanding and utilizing LPFN's knowledge systems, Elders' will help the youth to understand the local climate and soil conditions, as well as the best methods for planting, harvesting, and preserving methods. It has been determined that LPFN's knowledge systems are providing invaluable insight into understanding the local environment, land, and resources, as well as the unique needs of growing healthy and abundant food. As mentioned by one of the participants: *"How did we survive?... we had our hidden garden, so we had our own processes and how we harvested our wild, we preserved our food, it was a strenuous activity, but if you wanted to survive. And now with the high cost of inflation you want to be able to look at how do I minimize my carbon footprint? How can I increase the proximity of the plant? like using charcoal. It called tera perma, it's a Latin phrase. And what they did there, was make a lasagna of carbon, organic matter, sand gravel and they made a process of up to three feet. And what they did, was sequestered the carbon and they had the humus and plant material and the filtration, that was started in South America, they had these pits and it was self-fertilizing. We didn't have to fertilize anything, and it produced 20-30 % more food per acre than any other lands possible, like how come were not doing that? how come were not using and building meliponids and how come were not using underground storage, the heat from mother earth with the heat from the meliponids that you get you can grow food all year around. So, in terms of what it is that I want to do I want to be able to preserve this knowledge for people and future generations to use it"* (LPFN8, May 2022).

LPFN's Elders are a valuable resource when it comes to all food systems. They carry vital knowledge that has been passed down through generations, which can help us to better understand the importance of harvesting from LPFN's local environment, and in the most sustainable way. LPFN has a long history of successful harvesting practices, which can be beneficial for other communities to learn from and incorporate into action. LPFN strives to honor and respect the wisdom of their Elders, when it comes to harvesting and preserving their natural resources, because the Elders work towards food security and well-being, with their knowledge and years of experience.

LPFN's Elders and their Anishinaabe pedagogies is an invaluable source of knowledge to drawn upon, when it comes to harvesting their own food. By learning from the wisdom of the Elders', the whole community can better understand the techniques and strategies necessary for a

successful harvest. Including Indigenous knowledge keepers is crucial and one effective method, which ensures the involvement of community members at every stage (Ahmed, et al., 2022). This knowledge can help LPFN to prepare the land, select the best crops, and use the most efficient methods for harvesting. With this knowledge, LPFN can ensure that their harvest is successful and that they can continue to benefit from the abundance of hard work. By taking the knowledge learnt from the Elders' and knowledge keepers, LPFN youth can better prepare themselves to harvest their own food and continue working towards food security and the overall well-being of their community members.

4.4 Roles and Responsibilities

Roles and responsibilities are the fourth cited sub-theme by participants for food security and wellbeing, included under this theme are: Roles and Responsibilities, The Good Life/Culture and Innate Heart Work.

Roles and responsibilities were the most cited sub-theme by participants under the theme roles and responsibilities, included in this theme are: roles and responsibilities, learning the responsibility as a knowledge carrier, following protocols and practices, and role modelling responsibilities.

4.4.1 Roles and Responsibilities as an Anishinaabe community

Relates to how each member of the community has a specific role based on their territory, clan system and nation. They are responsible for maintaining, traditional laws, customs, protocols and practices, preserving their cultural way of life, in relationship to all things. This way of life assists in creating a positive and inclusive environment for Anishinaabe people, and all things to thrive. Anishinaabe relationships involves the transmission of responsibilities through stories, teaching songs, and ceremonies that trace back to the origins of creation, imparting knowledge on how to establish connections with one another (Chiblow, 2023).

Indigenous communities need to learn from Indigenous knowledge keepers, in order to understand their roles and responsibilities. By following Anishinaabe law, protocols and practices, and role modelling this way of life, LPFN can ensure that their way of life is preserved and passed down to future generations. LPFN is striving to uphold the traditions that have been passed down to them by continuing to invest in learning from their relatives, Elders' and

knowledge keepers. By developing LPFN's traditional roles and responsibilities, they can ensure that the knowledge, values, and pedagogies of their Anishinaabe ancestors will continue to flourish in kindship. As mentioned by one of the participants: *"You know we learned a lot by our parents and especially with that women medicine that was given down to us. You know a lot of people come and ask me for it and I know I tell them sometimes you know, you can heal yourself if you want to just listen to the Elders' and they'll tell you what to do"* (LPFN4, July 2021).

A reoccurring key message that replays throughout each theme and subtheme are how it is vital to learn from the Elders, parents/caregivers and knowledge keepers in the community to meet best practices and outcomes, specifically related to the land, which is interconnected in all things. LPFN has a long history of navigating important roles in their community. LPFN has a responsibility to ensure that their Anishinaabe culture and traditions are passed down to the next generation, and role modelling is an important part of this.

This includes teaching LPFN youth about their identity and knowledge systems, while instilling values of respect, responsibility and resilience, and providing guidance and support. LPFN community want to pass on the knowledge of roles and responsibilities to ignite the youth with a sense of identity, belonging and connection to who they are, while assisting them to develop the skills to be successful in all aspects of life. Reclaiming Indigenous kinship structures is necessary to ensure a prosperous future for the children, youth, and those yet to come (Jacob & Sabzalian, 2022; Loukes, 2023). Roles and responsibilities are an obligation that Anishinaabe communities take seriously, and one that is essential to the continued strength and vibrancy of their relationships and way of life.

The Good Life/Culture was the second subtheme for roles and responsibilities and under this theme included: cultural reliance, finding a balance, healthy coping mechanisms for a good life, respect traditional practices, and connect to cultural ways.

4.4.2 The Good Life/Culture

Purpose of the Anishinaabe good life is to seek balance and harmony with all of creation. Anishinaabe people's way of life is based on the belief that all living things are interconnected and that we all have a responsibility to take care of each other and Mother earth. This includes practicing their cultural belief systems, caring for the land, and respecting the traditional knowledge systems of their Anishinaabe ancestors.

The Good Life for Anishinabe people is a way of doing, seeing and being that connects every living being. This good way of doing things is how we must strive for balance and harmony in our lives (McMillan, 2023; Pimachiowin Aki, 2012).

The good life originates from the knowledge passed down by LPFN's Elders'. The children learn about relationships, connection, and interconnectedness from their parents at an early age. They teach the importance of living The Good life, which allows them to achieve balance and reap its benefits. As mentioned by one of the participants: *“So, I told my boys if you cover every corner and it has to be in balance, you balance everything out and your life will go forward in a good smooth way. Yeah, life will throw things at you to try and knock you off but if you have your culture to rely on, or you have your spiritual guides your spiritual teachings to rest upon. When you're going through hardships, when you have that that's going to carry you through any hardship. As Anishinaabe people, that's our coping mechanism, take care of the whole body. So, if any of that is out of balance it's so easy to use whatever to cope”* (LPFN6, May 2020).

The Good Life is intrinsically tied to relationships. The Anishinaabe people understand the importance of forming and nurturing connections with all living things. This includes not only humans, but also plants, the spirit world, our ancestors, and the future generations. By acknowledging the diverse beings in creation, we strive to maintain balance and live in a way that respects and honors all things. That is why teaching this way of life to the future generations is a safe space, where they can explore their identity, while implementing cultural values that will help assist them in every aspect of life.

Many Indigenous Elders emphasize the holistic nature of health, which strongly suggests the importance of living and acting in balance and harmony to obtain a good way of life, the way their ancestors intended for them, thinking seven generations ahead. The Anishinaabe saying “Mino bimaadaziwin,” which means “living in a good way.” Anishinaabe people believe that by following their ancestral ways with good intentions, they can achieve their desired outcomes in terms of health and living (Dellinger & Poupart, 202; Pimachiowin Aki, 2012). This approach to life extends beyond just physical well-being and applies to every aspect of life, including artistic

expression related to identity, language, spiritual practices, connection to their ancestral lands and much more, which always promotes living The Good Life. The Good Life also extends far beyond the land; however, it is all interconnected and needed to live in a good way. Creating land-based initiatives for the youth will bring opportunities for them to learn about how they can be part of the momentum, for successful outcomes in LPFN. To learn about who they are, how they have basic human rights, that they have belonging and value, but also, they will learn how they can be part of the solution. Living the Good Life supports a sense of purpose in everyone, bringing one closer to who they are meant to be as contributing citizens in their LPFN community.

Innate heart work was the third and final subtheme for roles and responsibilities and under this theme included: Intentionality heart work/innate, and Innate responsibility to care for our people.

4.4.3 Innate Heart Work

Innate heart work is a concept that emphasizes the importance of following one's inner compass, meshed with the knowledge of ones' ancestral teachings. It encourages self-reflection and understanding of one's own values and beliefs, intertwined with their Anishinabe way, and this encourages the people to take ownership of their lives and make decisions that are in alignment with their personal values and Anishinaabe ways of being and seeing. Innate heart work reminds the Anishinaabe that they have a responsibility to access their inner wisdom, that will in return guide them in their lives in a good way, that will supports their ability to make decisions that honor their purpose, their community and their ancestors as well (DD, Personal Communication, December 2023).

Understanding one's innate heart work not only provides insight into personal and cultural values, but also offers a deeper understanding of community roles and responsibilities. This includes recognizing the importance of being actively engaging with the land, which entails various responsibilities, such as stewardship and community involvement on all levels.

Embracing these duties fosters a sense of shared responsibility and ensures the well-being of both the land and its community members. As mentioned by one of the participants: *“You know what? its ingrained, its innate. Its innate because you love your family, and you love yourself. You want*

to live a healthy life and you want to enjoy this life...I come from a long line of healers on my dad's side, and my grandmother was a midwife in the community and a herbalist, and my grandfather was a very gifted spiritual leader in the community and that went on to my father and his children. My siblings are also in healing, and their traditional ways they are very humble people too ... We go to ceremony when were needed or another family needs it. So, with that said there, with my family there are a few of us that do this healing work and I prefer it that way. I've had a lot of good teachers in my life, guide me along" (LPFN6, July 2021).

Carrying the responsibilities of our Anishinaabe ancestors is a gift that one must embrace while conducting the work needed to accomplish living the life our ancestors wanted for us. As Anishinaabe people, it is our duty to act upon the knowledge passed down to us by our Elders'. These invaluable knowledge systems are unique and encompass a variety of sources, including direct experiences with things such as, dreams, ceremonies, and the interconnectedness of all life. LPFN sees the urgency to work towards sustaining mother earth for future generations. This requires actively engaging in practices that promote environmental conservation, cultural preservation, and community empowerment, which all happens on the land. By honoring their Anishinaabe ancestors and the knowledge they carry, LPFN community can ensure a better future for all.

Innate heart work is deeply rooted in our relationships with Mother Earth and one another. According to Anishinaabe teachings, the world was created with a purpose, and it is Anishinaabe people's individual responsibility to honor this purpose through harmonious interconnectedness with all life, which again happens on the land, through hands on land-based activities. To truly engage in innate heart work, one must utilize the knowledge passed down by Indigenous Elders, as they hold the teachings that guide us in accomplishing our purpose in life. Heart work means to embrace these teachings and apply them to your own journey (Chiblow, 2021). This understanding reflects the importance of self-sufficiency within one's culture through the land, but also in all aspects of life.

4.5 Local Support

Local Support was the fifth cited sub-theme by participants for food security and wellbeing, included under this theme are: Community/collaborative support, funding, support, volunteer support and relationship building.

4.5.1 Community/Collaborative Support

Community collaboration is a collective process that engages individuals and groups with projects that bring together various perspectives. This type of collaboration supports the local community by focusing on meaningful relationships and partner building. By working together, community members aim to improve a practice, in this case, the successful outcomes of land-based practices-(Levkoe & Sayers, 2023).

Community/collaborative support was the most cited sub-theme by participants under the theme local support. Included in this theme are community support, community involvement/collaboration, community program initiatives, and community involvement.

Community collaboration is crucial for supporting local communities, including LPFN, when community involvement is encouraged, and community programs and initiatives are implemented for successful local support, directly related to land-based outcomes. This support will ensure that community members have the opportunity to be part of the movement for the preservation of Anishinaabe knowledge systems through the return of daily traditional practices on the land. It is important for LPFN members to actively participate in these collaborative efforts, as they contribute their individual insights and expertise. By doing so, they can collectively address challenges, share resources, and ultimately create positive change within their LPFN community. As mentioned by one of the participants: *“It is very rewarding. And then were doing vegetables, cherries, apples, so you sometimes we have emergencies in our community, and this would be the perfect place to gather our and help out as many families as we can. I’m hoping that the community once they learn and see what we’re doing, I hope they come out and just look at it and take it home and do it in their own yard... So, I’m hoping if the community just sees what we’re doing, and takes an interest, they can take it home to their own yard and start their own and do their own vegetables”* (LPFN3, July 2021).

At the local level, there is a growing movement of support for LPFN community. LPFN organizations and individuals are coming together to provide resources and advocacy for the people in their community. These efforts include providing educational opportunities, creating job training programs, and advocating for the rights of LPFN members. These initiatives are making appositive impact in their lives and it is encouraging to see LPFN coming together to

show their support for on another as well as continue to integrate pivotal knowledge to their youth for future productivity in relation to land based outcomes.

By working together, sharing knowledge and resources, and actively involving community members in decision-making processes, LPFN can create a sustainable and resilient food system that respects and honors their traditional practices. It is essential that they prioritize community engagement and participation to achieve their shared goal of successful land-based outcomes and a sustainable future for the coming generations.

At the local and community level, it is necessary to actively engage LPFN community in discussions regarding the development of local food systems. This can be achieved by convening important stakeholders and leaders within LPFN community, in a collaborative space, where collective efforts can be directed towards implementing policy changes that support self-determination in Indigenous food systems and practices (Kamal, et al., 2015; Kuhnlein, 2015; Kuhnlein & Chan, 2000; Miltenburg & Anderson, 2022). To ensure the success of community collaboration, it is crucial to establish clear goals and objectives, foster open communication, and promote inclusivity and diversity for each contributor. By following their Anishinaabe protocols, LPFN's community collaboration, can truly make a difference in the advancement of land-based outcomes and the overall well-being of their community.

4.5.2 Other forms of support: Funding, Voluntary work, Relationship Building

Throughout this study many ongoing themes helped support the land-based outcomes analysis. Three stand-alone sub themes following this portion of the study under the theme local support were; funding support, volunteer support, and relationship building. Funding support was the second cited sub-theme by participants under the theme Local Support, the frequency of this sub themes is relevant when discussing successful land-based outcomes for LPFN because financial support is necessary. Volunteer support was the third cited sub-theme by participants under the theme local support, this was the stand along frequency, but vital subtheme when discussing what is needed, which is community members volunteering their time, in order to receive the desired outcome of successful land-based initiatives in LPFN. Finally, building relationship was the final cited stand-alone sub-theme, which is also vital, because building and maintaining relationships within LPFN community is central to how their societal structure

successfully functions. kinship, clans, and nations are integral in this regard, as they provide a sense of belonging and identity for those within LPFN community.

All three stand-alone cited subthemes play an essential role in how to accomplish successful and based outcomes, which will briefly be discussed in conclusion. LPFN needs funding to help preserve their Anishinaabe knowledge systems, as well as to help them participate in the economy, this includes having the funds and support to grow locally, paying our help and elders for their time, as well as work collaboratively. This means that the government, leadership, businesses, and other organizations around LPFN need to work together to ensure future successful land-based outcomes for LPFN youth. In relation to volunteer support, LPFN needs to do a LPFN call out and recruit more people to share their gifts specific to Indigenous food systems. And finally, building relationships is also an effective method to establishing meaningful connections with one another, strengthening their sense of community and belonging, and therefore their sense of responsibility to be part of the solution.

Communities such as LPFN have faced a long history of oppression and marginalization as Anishinaabe people, and as a result, they are in need of additional support and resources to help them thrive. Funding is an essential part of this support, as it can help provide access to education, well-being, land-based activities, and other essential services. for example, funding for school food programs lacks reliability and often fails to prioritize local food purchasing (McEachern et al, 2022 p.14). This is one issue with funding, although funding is not the main issue for successful land-based outcomes, the financial support will surely enable more opportunity and goals met for LPFN community.

Volunteer support is needed for the success and revitalization of Indigenous food systems. Volunteer support plays a crucial role in the well-being and cultural preservation of Indigenous communities, such as LPFN. It is imperative that Anishinaabe traditional food systems are community-based, as they not only provide sustenance, but also foster a sense of identity and connection to the land and territory surrounding LPFN. In order to ensure successful outcomes, volunteers who understand Anishinaabe worldviews and perspectives are essential. Their involvement contributes to the larger resurgence movement, which aims to revitalize and reclaim Indigenous knowledge and practices related to food production and consumption (Robin,

2019). By recognizing the importance of community-based food systems and the value of volunteers with cultural competence, we can support the empowerment and self-determination of LPFN.

Anishinaabe worldviews prioritize and understanding the value of strengthening relationships among family, extended family, clan, and nation, while also considering relationality towards all humanity and of course, Mother earth. These perspectives encompass concepts such as connectedness, reciprocity in relationships, spirituality, and maintaining a balanced relationship with the land and with all living things. These specific concepts are highly regarded and form the foundation of Indigenous customs and practices, fostering a deep sense of interconnectedness and harmony. Embracing these principles can lead to a more respectful and sustainable way of life for all our relatives (Ball, 2004; Cornassel & Bryce, 2012; Heid, et al., 2022; Pickering, et al., 2010).

Summary

In conclusion, it is important to emphasize the significance of rediscovering Indigenous knowledge through intergenerational learning and active engagement in land-based learning, for the well-being and overall empowerment of the LPFN community. By actively participating in their roles and responsibilities, LPFN can shift their focus towards Indigenous food systems, leading to life-changing experiences and positive steps towards empowerment in their community. This direction promotes the preservation of traditional knowledge and cultural practices, which has been identified as important by all nine participants. The five main themes discussed in this chapter provide valuable insights into the perceived outcomes of land-based learning for the health and well-being of the LPFN community i.e. Intergenerational transmission of knowledge.

Chapter 5: Challenges to promote land-based learning

As discussed in section 2.2.1, there are still several challenges associated with successfully implementing Land Based education in Manitoba. Indigenous communities are working diligently to collaborate across Canada with communities such as LPFN to address the main challenges and come up with relevant solutions to assist the youth to learn about their cultural identity, by creating opportunities, strategies and solutions that promote land-based education. The main challenges specific to LPFN are as follows, a need for; cultural mentorship, accessible and affordable food, proactive planning, land-based development/programming and finally there is a lack of community investment and support, as mentioned by the participants. As explained in chapter 5 through the participants interviews there are many overlapping themes that resonate throughout this study because it is all interconnected, but rather very intricate themes that all have value. Many reoccurring themes throughout are interrelated to land, language, identity, and cultural practices on the land because that is who Anishinaabe people are. The challenge exists to identify what the issues are, so as to find a solution, which is discussed in the following chapter.

Based on responses of participants following five themes represent the challenges to land-based learning: 1) need for more cultural guidance; 2) need for affordable access to food all the time; 3) result-oriented planning; 4) needs for land based development and programming; and 5) lack of /requirement for community investment and support. All these challenges have ultimately created a major disconnect for LPFN, from their ancestral territories, hindering their ability to engage in cultural practices and teachings that are deeply rooted in the land. Additionally, the loss of traditional knowledge and the intergenerational quote and reference here trauma resulting from historical injustices further complicate the process of land-based learning. Despite these challenges, efforts are being made by LPFN community to revitalize and reclaim land-based education, as a means of preserving cultural identity and fostering a stronger connection to their land. The following table displays the land-based learning themes that emerged throughout the interviews, the number of interviews that they were mentioned in, and the frequency of quotes that interconnected into each theme and subtheme for challenges to land-based learning.

Table 3 Frequency of Themes Surrounding Land Based Learning Challenges

| Theme/Code | # of Interviewees | # of Quotes |
|--|-------------------|-------------|
| Need for more Cultural Guidance | 6 | 8 |
| Food security and Sovereignty through | 5 | 7 |
| Result-oriented Planning | 4 | 4 |
| Need for Land based Development | 3 | 3 |
| Requirement for Community Investment and Support | 3 | 3 |

5.1 Need for Continuous Cultural guidance

Cultural guidance plays a vital role to share, preserve and live according to Anishinaabe ways, by honoring traditions, knowledge, and wisdom in communities such as LPFN. It embodies many practices, including, oral teachings, food knowledge, healing, ceremonies, dance, art, and music. (DD, Personal Communication, 2023).

Need for cultural guidance on a continuous basis was the most cited theme by participants, with sub-themes that indicates variety of ways in which participants reported on some current challenges to land-based learning. These include a) Cultural rediscovery; b) Elder guidance mentorship. The most common sub-themes of need for cultural guidance include, felt need for reclamation of culture/ identity/ language, loss of culture/connection, colonialism, mentorship, elder guidance, encouraging ceremonial practice, knowledgeable leaders, and rediscovering ancestral knowledge.

As mentioned by the participants in this study, they have learned this knowledge that is passed down from generation to generation, and that it is necessary to ensure that this knowledge is shared to assist cultural guidance for the next seven generations. Through ensuring access to cultural guidance, LPFN knowledge keepers, community leaders, members, and families, will thrive and overcome challenges and barriers. For example, one participant mentioned: *“I only know what I know, and I only do what I do. I don’t force anybody I try to encourage people. I have a full moon ceremony every month, sometimes I’m standing there by myself, but that’s okay. In terms of healing, colonization and all that in reference to food and how; that’s changed our life. It has changed it in every aspect of our lives as Anishinaabe people”* (LPFN6, July 2020).

Another community participant shared, *the young men they don't camp, they won't camp, they would rather shoot deer or elk with a spotlight*" (LPFN2, Sept 2021).

Local Elders wish to teach young people and seeks more involvement from local community members, it is refreshing to learn that LPFN knowledge keepers are willing to share their knowledge and serve as mentors to students, because they know by doing so, they will ensure access to cultural guidance and generational knowledge within their community. As mentioned by one participant *The challenges we have right now, is we don't have enough manpower. There is only three of us*" (LPFN 4, July 2021), *"The challenge is getting all the information correctly, and even if it's not correct, you know try to learn how it was actually done"* (LPFN9, May 2021).

Indigenous communities, such as LPFN persistently encounter systemic challenges that prevent intergenerational- continuance of cultural guidance, and this all stems from assimilation, discrimination, and legal policies concerning ecological and cultural disruptions, which pose significant barriers to the well-being of these communities (Ninomiya, et al., 2022). The need for cultural guidance was the most cited theme for challenges because it emphasizes the need to rediscover Anishinaabe culture through mentorship, with the aim of reclaiming their identity, language, practices, and customs that have been impacted by colonialism. It is an urgent time to work together to overcome these challenges, in order to restore and preserve Indigenous knowledge systems.

5.2 Food security and Sovereignty

Many participants expressed the need for affordable access to healthy and cultural food all time: Under this second most common sub-theme by participants, following sub-themes emerged: a) need for food sovereignty/security and b) need to rediscover ancestral foods. As mentioned by one participant: *"With the cost of food these days we need to look at how we need to connect back to the earth, because mother earth provides for all of us. From time immemorial the gardens that we have are going to look at our food sovereignty. Being realist and harvesting our own"* (LPFN 3, July 2020).

The need for affordable access all the time is significant because food access nourishes the body, but also carries cultural and spiritual value to our people. It is a way to connect with

our ancestors and preserve our knowledge and traditions for the next generations, while practicing our sovereignty as Anishinaabe people (DD, Personal Communication, March 2023).

Land-based learning challenges are directly link to access to affordable and cultural foods all the time because all Indigenous communities have skills, knowledge, and cultural memory to grow their own food. As mentioned by one participant: *“Well, part of the initial challenges is discovering what are grandparents used for food. We find the seeds and we planted those seeds in a safe zone, for example out where we fasted. You know where my little garden is? where my medicine is. It’s a safe zone because there is not agricultural activity for 5-10 km from where my garden is, my private little garden out in the hills. But I also took seeds from different parts and got the best seeds and replanted them there. So, we have to have these safe zones that mother nature looks after and it spreads and makes these plants and makes these plants available to us”* (LPFN8, May 2021).

Having access to affordable food all the time, are very important discussions to have when it comes to Anishinaabe food governance and sovereignty as it relates to protection of the land, access to land, identity and revitalizing plants and growing their own food. In addition, promoting food sovereignty initiatives can help these communities become more self-sufficient and sustainable building on their ancestral knowledge systems. This will not only provide for their families but also allow them to pass on their intergenerational knowledge which will ensure the resurgence of their way of life (Corntassel & Bryce, 2012; Loukes, 2023; Pickering, et al., 2010; Wildcat, 2014). Having access to affordable food all the time is an essential aspect to ensuring food security and cultural preservation. Therefore, growing your own food, hunting, trapping, and fishing can be affordable food options that would allow the youth and communities to meet their nutritional needs without financial strain. Having access to food for Anishinaabe people highlights the importance of traditional food systems and knowledge on the land as well. By supporting affordable food initiatives and Anishinaabe food sovereignty, communities like LPFN can work towards a more equitable and sustainable food system that provides and benefits the community, while also encouraging land-based hands-on activities on the land.

5.3 More Result-oriented local planning

This was the third most common sub-theme by participants, which includes under this theme are, a) perseverance for results, b) political barriers and c) inclusion of advocacy voices in local planning voices less heard. Result-oriented planning for results involves initiating and developing a comprehensive strategy that aims to achieve specific outcomes and goals. This approach emphasizes the importance of integrating practical experiences with theoretical knowledge, allowing learners to gain a deeper understanding of the how to be food secure, learn on the land and meet the goal of sustainability in all areas of Anishinaabe life (DD, Personal Communication, 2021).

By continuing to work towards progressive measures in terms of looking at the challenges, it will be necessary to incorporate result-oriented planning around land-based learning, which includes theory and practice. Some land-based learning strategies that are included in progressive planning can be: hands-on activities, field trips, outdoor activities, ceremonies, community events and engagement. Land-based learning can also provide students with valuable skills and insights. For students, land-based learning can enhance academic learning, skills and insights based on academic and ancestral food knowledges and fosters a strong connection to the land where they were raised and learned. It also cultivates sustainable practices and caring attitude for future generations among learners. Overall, result-oriented planning for in land-based education is essential for creating meaningful and impactful learning experiences. As one participant mentioned: *“All of the sudden I got hired on and David’s like here’s the trees, plant them. And it was so hard because the land that they had picked is awesome, but it usually it takes the plants a year for it to settle. We had to get these trees in, but I was battling with roots that were about this thick, so I had the master chainsaw, you know what I mean? I had to master my axe just to get our trees in. I was so sacred, like when they first went in, and are they going to take. I had all this pressure on me, because I did 130, then I’m wondering if I spaced them correctly... because all this pressure and then this spring, David and I went out and then we checked, and they had all started sprouting. I swear to god, I just burst into tears, because it was emotional for me because all this pressure was gone”* (LPFN3, July 2021).

While this was a challenge for the participants, it can also provide very valuable opportunity to work together with a knowledge keeper to accomplish a goal of planting 130 trees for a healing space in LPFN, which is also all land based. Result-oriented planning is essential

when it comes to reaching any goal, encompassing hands on activities is also key for LPFN. In the participants case she was learning the process of planting and growing, meanwhile learning much more about the land and herself. Learning through trial and error is an important aspect to this process.

Result-oriented planning is essential when it comes to challenges in land-based learning, encompassing activities such as planting, growing, and harvesting in this case. Also, learning through trial and error is a fundamental part of this process. By being actively engaged in the land and embracing land-based education, learners can reap numerous benefits to living a healthy life. Growing up my family had a huge garden; my father faithfully planted each year since I was a child. He tried new things each season and to help his garden flourish. He also planted things like corn and each year they grew bigger as he learned through trial and error what worked and what did not. He dedicated his time to growing fruit and vegetables because he enjoyed the process of watching things grow and later enjoying the end result of delicious food for his family. This kind of simplicity is overlooked in today's busy society. It is time to return to a place and space that allows our youth and students to step back and take some time to plan and reach some goals that will assist them in their purpose and overall lifestyle.

In recent years, there has been a significant growth in Indigenous result-oriented planning, which is closely tied to perseverance and overcoming political barriers. This is due to the fact that Indigenous voices have historically been marginalized and unheard. In direct relation with land based learning and there is a shift towards self-determination, with the aim of creating self-sufficient communities that engage in progressive planning (Ball & Janyst, 2008; Castleden, et al., 2012; Grimwood, et al., 2012; Hibbard, 2022).

5.4 The Need for Land based Development and Programming

This was the fourth most common sub-theme by participants, which includes under this theme are, a) Prioritizing sustainable land-based economic development through active involvement of elders; b) land-based funding and c) safe zone for land use.

The Need for land-based development and programming involves the challenge of finding strategies that will reclaim sustainable practices that are deeply rooted in the connection between Anishinaabe peoples and our ancestral lands (David, 2021). As mentioned by one

participant: *“There is of course the racism and the negative things that divide and conquer, and politics, there’s a lot of things. And of course, the environment that’s another thing that we talk about amongst ourselves us women. Environment, one lady told me she used to pick berries and ever since the paper mill moved there and cutting trees and making paper, the frogs are gone, the berries are gone, and even when they did find some berries it wasn’t the same as before”* (LPFN5, July 2021)

The participant highlights the importance of listening to our Elders, as they possess practicing ancestral wisdom that can aid in the preservation of our culture and the enhancement of our economic development opportunities. Land-based funding mechanisms can further support these efforts, providing financial resources for infrastructure development, job creation, and other essential initiatives. Additionally, establishing safe zones for land use helps protect natural resources, preserve the land, and lessen any potential risks that would harm the land. Together, LPFN continues to share their knowledge related to requirements for land-based development because they understand how this type of programming will contribute to a balanced and prosperous community. The need for land-based development and programming refers to a system that is funded and implemented through land-based initiatives. This challenge involves an approach that utilizes resources and finances from land-based activities to support the development and implementation of land-based initiatives. By leveraging land-based funding, it becomes possible to establish and sustain developmental initiatives, that are directly tied to land-based learning (Berkan, 2020). For LPFN this includes various projects and programs aimed at enhancing land management, preservation, and sustainable development. As mentioned by one participant *“Funding has always been a problem since before I’ve been involved in education”* (LPFN 9, May 2020).

5.5 Community Investment and Support

This was the fifth most common sub-theme by participants, which includes under this theme are a) addiction struggles; b) climate crisis; and c) community support. However, the lack of Requirement for Community Investment and Support is one challenge that is hindering our community from fostering collaborative development. To prioritize this, would actively invest in the overall well-being of our community members (DD, Personal Communication, Dec 2022). We need to invest in the LPFN community, because it will help create opportunities for land-

based learning, mental health and addictions programming, climate crisis planning and community involvement at all levels. Additionally, the challenge of not being fully supported in terms of addictions, climate crisis and community support, LPFN still continues to prioritize and allocate all their resources to ensure the empowerment and success of their community.

The challenge related to the struggles and crises that requires support is mentioned by one participant: *“Doing this work, trying to go for healing, trying to deal with you know living a good life. I have a lot of family member and friends, friends’ children who are really struggles with addictions, but also diabetes, even young kids... You probably had a lot of comments about that and its impacted everything, because I’m a diabetic. And with my family there is no history of diabetes, it’s not hereditary, its more because of the lifestyle. Stress is a big impact, and our eating habits. I’m drug and alcohol free for over 20 years, and smoke free for 10 years, but my one is food. I use that as comfort food, that goes back to my grandparents always giving me candy to comfort me. I had to stop here with my grandchildren, because I don’t want them to be that way. So definitely it impacted every part of our life as Anishinabe people. So much people are diabetic, a lot of people my age is diabetic...Stress is what brought it on, we’ve had a lot of trauma in our lives. First thing I was affected by is I was diagnosed with PTSD, depression, anxiety and all of that. And so, its impacted me as an individual. So, it’s really hard to cope! I said this journey of sobriety is hard work, and when people are in that whole realm of addictions its hard work to crawl out of that. People are going to go to the easiest place to numb that pain that generational pain. Those family curses those individual abuses. The easiest thing is to reach out and use, alcohol, gambling, food, shopping to ease that”* (LPFN 6, July 2021).

We need to hold ourselves accountable to our communities, because our people are something worth investing in for a future for our children and those yet to be born. *“The younger ones, there’s a lot of urgent issues, like homelessness, addiction issues and all the urgent stuff that we see in the big picture of alcoholism...It’s kind of like we have to reimagine. We are in a transition and taking advantage of this Covid-19 too. We also have a reality, like there’s a lot of mental health issues”* (LPFN, 5, July 2021).

Summary

The challenges of a) cultural guidance, b) affordable access to food all the time, c) result-oriented planning, d) land-based development programs, and e) community investment and support are all significant when examining the challenges discussed in this chapter. Cultural guidance is necessary to ensure that Anishinabe people can navigate and understand their identity, language, knowledge systems and customs and practices. Ensuring food security and sovereignty through reliable and affordable access to local Anishinaabe foodways is central to addressing food insecurity and ensuring that LPFN has access to nutritious food all the time with own food governance system. Result-oriented planning is essential to achieve tangible outcomes and measure the effectiveness of various land-based initiatives. Land-based development programs in partnership with community and elders are needed to utilize available land resources efficiently and sustainably. Lastly, community investment and support for on-going health and wellbeing risks are vital to foster a sense of belonging and empower the LPFN community to thrive. These challenges require careful consideration and strategic approaches to create influential and sustainable solutions for LPFN- which are being discussed in the next chapter.

Chapter 6: Solutions to Address Challenges

Through Initiatives and Intergenerational Transmission of Knowledge from Elder-Youth Connections

The purpose of this chapter is to examine various solutions to addressing land-based education challenges. In this chapter will be included current initiatives, as well as suggestions for Elder-youth transmission of knowledge, which both actively work to overcome obstacles in land-based learning. The most important component to addressing solutions to challenges when focusing on land-based education, specific to Indigenous food systems in LPFN, will be to listen and understand the shared experience by the Elders' and participants from Long Plain First Nation community, Manitoba, as they know themselves best. This chapter highlights the importance of finding solutions that address the many challenges, in order to work from a solution-based angle, for the promotions of LPFN's good health, wellbeing and continuity on the land. All ten participants identified three main themes for solutions to address challenges to land-based education, which included:

- Cultural Empowerment and Revitalization
- Long Plain First Nation Participation and Partnerships Building
- Work in Progress

The following table demonstrates the number of interviewees that mentioned the themes under review, these themes are an indication of the number of quotes which coincided into each theme, as well as and the percentage of interviews which contained each theme.

Table 4 Frequency of Themes Related to solutions to address challenges associated with land based education in LPFN

| Outcomes perceived by participants | #Quotes | # Interviews |
|---|---------|--------------|
| Cultural Empowerment and Revitalization | 13 | 8 |
| LPFN Participation and Partnership Building | 13 | 9 |
| Work in Progress | 5 | 5 |

6.1 Cultural Empowerment and Revitalization

Cultural Empowerment and Revitalization was the most cited theme by participants. The sub-themes for this category represent a variety of ways in which participants reported on how Anishinabe knowledges systems are being utilized to empower and revitalize their culture and

land based teachings, against all obstacles. The themes include a) encourage traditional practices; b) plant revitalization knowledge; c) intergenerational transmission of knowledge; and d) medicine is food. The most common sub-themes of cultural empowerment and revitalization include family-oriented relationships, community supports and Elder leadership.

6.1.1 Encourage Traditional Practices

To preserve our history, but also to foster a deeper connection with Mother earth, and those who have passed on. By honoring and respecting our traditions, we can learn valuable lessons about sustainability, relationships, community, and who we are as Anishinaabe people (DD, personal communication, April 2022).

The overall solutions to addressing the challenges are closely interrelated to cultural empowerment and revitalization. Overall, this chapter provides an important look into solutions to addressing the challenges associated with land-based learning, and specific to food systems for the LPFN community, as perceived by the participants. As mentioned by one participant: *“I try to encourage young people that there’s a better way and I know this is my way, and if I can teach them my way, what worked for me and my children. If they could see that then, that makes me feel like I’m doing my work. But people are hesitant to live a good life, or try to get better in their healing journeys, and it’s not their fault, again I don’t pressure anyone to come, but because that’s what’s worked for me... You got to help the people that are wounded in that addiction cycle. You got to throw as much energy at them, you got to create healthy citizens again. you throw healthy living, you throw sports at them, you throw our culture, our spirituality... We follow the seven teachings, you got to live all those teachings, not just say it. You have to live by all that integrity, humbleness, love, bravery, all that when your moving forward. We all got to carry that in your heart when your moving forward”* (LPFN 6, July 2021).

Encouraging traditional knowledge systems and practices hold immense value to Anishinaabe people as it is interconnected in everything they do; it would only be rational then that these systems and practices are also the solution to the challenges. Encouraging traditional practices in LPFN is a demonstration of the rich Anishinaabe knowledge passed down from generation to generation.

To promote and encourage traditional practices within the LPFN community, it is essential to raise awareness and provide support. One approach is to organize workshops, training sessions and ceremonial events that highlight the value and importance of these traditional practices. Additionally, creating educational platforms for knowledge exchange and collaboration among community members can foster the preservation and revitalization of traditional practices (Absolon, 2010; Graham, 2005; Pimachiowin Aki, 2012; Styres, 2011). It is vital to engage the LPFN community to address this challenge with solutions that consists of, listening to knowledgeable community perspectives, and involve them in decision-making processes that can encourage cultural revitalization and land based curricular education. Another solution to address the challenge starts with recognizing and respecting the Anishinaabe way of life and traditional practices in LPFN, which will further contribute to their sustainability in all areas of their well-being.

6.1.2 Plant Revitalization Knowledge

To Anishinaabe people, plant revitalization knowledge refers to sharing and understanding the practices that supports the restoration and preservation of the standing tall people. (DD, Personal communication, April 2022). Acquiring plant revitalization knowledge consists of promoting food security and preserving traditional knowledge systems. By valuing and promoting plant revitalization knowledge, LPFN can continue to thrive and maintain their deep connection with Mother earth, through cultural empowerment and revitalization methods. One participant mentions that: *“Part of overcoming the challenges is taking a look at rediscovering ancient knowledge. It's called before the onset of agriculture, wheat and barley and some of the grains we use that have gluten in it. Our diet was way different back then and we lived longer, and we were healthier for it. Now if you take a look of our ingredients of our daily bread, there are so many chemicals in there that, our daily bread is no longer pure. So, we have to go back to that pure, nutritional base because food is everything and in our way of thinking”* (LPFN 8, May 2022).

David Daniels gave me a 500-year-old squash plant two years ago. He said he was given the seeds, protected in clay for over 500 years. I then gave it to my sister Karen, the gardener. She planted and harvested it, and brought it to my place, she made roasted squash soup. And, we took it to David, he seemed pretty impressed and asked if I could cook the same

soup as my sister. David later explained that the squash treaty required anyone who grew the squash to give away seeds from their first harvest in return for the plentiful garden. The seeds recovered from 500 years ago holds significant meaning to me as an Anishinaabe woman. The ability to participate in the carrying on the treaty and tasting nutritional food that our ancestors ate is a privilege. And a form of plant revitalization that has been culturally empowering and transformed my way of thinking about what foods I put in my body.

Plant revitalization knowledge encompasses traditional knowledge practices, and knowledge that is passed down through generations, which is essential for the sustainable management of plant revitalization knowledge. This knowledge includes the identification, cultivation, sustainable harvesting of plants, and medicinal uses for the plant (Bihari, 2023; Settee & Shukla, 2020). The solution to address the challenge is through active preservation work and by promoting these knowledge systems. LPFN can ensure the preservation of their traditional knowledge systems and sustainable practices because it is the responsibility of the LPFN community to recognize, respect, and support plant revitalization knowledge for the benefit of present and future generations to come.

6.1.3 Intergenerational Transmission of Knowledge

In order to address solutions to the challenges, it is necessary to stress the urgency of passing down traditional knowledge systems to the younger generation in order to create capacities for land-based learning, which is also vital to restoring the mental, physical, emotional, and spiritual well-being of Indigenous communities, such as LPFN. By implementing Anishinaabe pedagogies and fully embracing and working towards revitalizing intergenerational transmission of knowledge, traditional practices, and connection to the land, LPFN can empower and uplift their community. This approach recognizes the deep interconnection between culture, land, and well-being, and seeks to foster healing, resilience, and self-sufficiency amongst the next seven generations. (Bihari, 2023; Lavallee, 2023; Settee & Shukla, 2020). It is through these same efforts that LPFN can honor and support the knowledge and wisdom of their ancestors, while finding a way that also promotes a good life for their community.

6.1.4 Medicine is food

Medicine is food is something that has become apparent to this study and is significant to mention as one participant shared: *“Let your foods be your medicines and your medicines be your food. So, in order to maintain our health, we have to eat healthy foods and the foods have to be medicinal plants. Like I told you, you can walk into that bush and come out with a salad, and be highly nutritious”* (LPFN 8, May 2022).

Medicine is food plays a vital role in the lives of the LPFN community, serving as nourishment for their well-being. Food is medicine because it is a preventative from disease, if you eat the nutritional foods, you will be healthy. The plants provide us with everything we need to survive (Edwards, 2023). The deep connection between medicine and food highlights the holistic approach to cultural empowerment and revitalization that emphasizes the importance of a balanced and harmonious relationship with Mother earth.

6.2 LPFN Participation and Partnership Building

This was the second most common sub-theme by participants, which includes under this theme: family-oriented relationships, community supports and Elder leadership.

6.2.1 Family Oriented/Relationships

Family Oriented/Relationships relates to the ongoing discussion on kinship and belonging within the community. LPFN place a strong emphasis on family and relationships. This strong sense of kinship Anishinabe people have fosters a sense of belonging and solidarity for communities such as LPFN. As mentioned by one participant. *“And my lodge me and my sisters work on that lodge, we open it for people, we kind of keep it low key because of Covid-19. We want to start with our family, and we will open it up to other people, but we’ve had some pretty incredible stuff happen in there, visions and stories and visitors a spiritual realm. And, it’s really a nice feeling people coming out of there revived”* (LPFN 6, July 2021).

An Indigenous child’s connection to their family and community can greatly influence a culturally responsive learning experience. And through these experiences we can understand how one solution is to continue to develop meaningful relationships and kinships with one another, so as to create an environment that respects and values our Anishinabe way of life. This

approach fosters a sense of belonging, promotes engagement, and enhances the overall outcomes for effective land-based learning.

These relationships are deeply rooted in their cultural traditions and play a vital role in their indigeneity. Family ties are highly valued and respected, with a focus on intergenerational connections and collective support (Peltier, 2021). The well-being of the family unit is prioritized, and decisions are often made collectively, taking into account the needs and aspirations of all family members.

6.2.3 Community Supports

Community Supports is mentioned in 5.1.5 in terms of challenges. However, the solution to address community supports is simply to have more support from the community in terms of cultural revitalization programming that promotes land-based learning. Community support is vital when addressing solutions to the challenge of land-based learning. As mentioned by one participant: *“If we had a couple more helpers, we would be able to get a lot more done. We need funding, because we can’t hire anyone. I’m constantly online looking for some funds, and that’s what we are doing in the office, to try and keep things going”* (LPFN 2, July 2021). Community support provides a foundation for effective solutions. By fostering collaboration and engagement, LPFN community can contribute to the success of land-based learning initiatives.

6.2.4 Elder Leadership

Elder Leadership is necessary to enhance the community capacity building, through their knowledge and experience to guide the decision-making processes and ensure the community perspectives are heard and in the best interest of LPFN (DD, Personal communication, May 2022). Elder leadership is essential to consider for effective participation and partnership building of the LPFN. By actively engaging with Elders, LPFN will foster a collaborative space that respects and values everyone’s contributions. This approach strengthens the foundation of the LPFN and enhances its ability to build meaningful partnerships. One participant mentioned, *“We need to contact Elders’ in the community that are knowledgeable in those areas. We need to have them show us what they have learned, and the students need to see that, and they need to watch other teachers. Because we are all teachers to begin with, we are all student’s and we all learn”* (LPFN 9 May, 2022).

Elder leadership has had a profound impact on my journey and has played a significant role in shaping the direction of my life towards living a good life. The story sharing, guidance, and experience I have received on my academic journey has been invaluable in helping me navigate through pivotal points in my life. The mentorship I have received has provided me with valuable insights, taught me important life lessons, and encouraged me to strive for personal growth and development. Elder leadership led me to a place of self-discovery, which can also happen for our youth if land-based initiatives are fully implemented for the success of the future generations.

Indigenous Elders in LPFN are esteemed knowledge holders who are eager to share their teachings, foster partnerships, and encourage active participation from community members. Elders are needed to provide leadership for a variety of community development and community-led projects. Their experience and knowledge make them well-suited for leadership positions, as they possess a wealth of knowledge and insights. By taking on these roles, Elders contribute to the growth and progress of their community. Their guidance and mentorship inspire others and help shape the direction of these initiatives. Leadership is the best place for Elders to make a meaningful impact and leave a lasting legacy (McGuire-Adams, 2023). Community discussions, along with an Elders' council, have the potential to foster partnerships that acknowledge the dedication and progress towards implementing successful land-based learning strategies. These collaborations are essential in addressing the challenges that arise. By engaging in open dialogues and seeking guidance from experienced knowledge holders, we can overcome obstacles and ensure the effectiveness of all land-based initiatives.

6.3 Work in Progress

Work in Progress was the third most cited theme by participants. The sub-themes for this category represent a variety of ways in which participants reported on how a hands-on approach to learning is necessary for finding a balance, in the process of reaching their goal of effective land based learning. The most common sub-themes of work in Progress include a) Hands on Approach; b) Finding a balance; and c) Trust the Process.

6.3.1 A Hands-on Approach

A hands-on approach as mentioned in 4.2.1, consist of an experiential-based approach to learning by doing. To address the solutions, it is necessary to discuss how land-based learning is a work in progress for LPFN, as the active knowledge keepers continue to trust the process to reaching their goals. As mentioned by one participant, *“The plants took and now that I know that, they can take to this soil, now all the options are open. You know you start thinking about other things you can start transplanting. We had this great idea with the grapes, that’s another thing, I really was to start cross breeding the species because we have a lot of the grapes out here, but they are very small. But if we can start cross breeding them with a larger grape, we can maybe start actually changing our vegetation and how it grows and how it produces, and that’s the exciting part about it”* (LPFN 3, July 2021).

Through her efforts she was able to achieve her goal of successful planting, the work and efforts taken to develop these skills are invaluable to our future generations. The benefit of learning by doing has major significance for Anishinaabe people, as this was our main form of education, when we watched and learned from our relatives and in this way, we learned about our role in society, our identity, language, and the land.

To address the challenges and find solutions that work, it is necessary to adapt past methods of learning and take a more hands on approach for land-based progress. It is being emphasized that if one continues to work and trusts the process, they will reach their goals, and expand far beyond, for the benefit of the community. A hands-on approach to learning increases student engagement and learning outcomes through its focus on learning by doing. By actively engaging in hands-on activities, students are able to develop a better understanding and application of knowledge (Bui & Yarsi, 2023; Pimachiowin Aki, 2012). This approach promotes a deeper level of learning, as students are able to directly apply what they have learned in practical situations. As a result, students are more actively involved in the learning process and are able to achieve better learning outcomes.

6.3.2 Finding a Balance

Finding a Balance as mentioned in 4.4.2 applies to *The Good Life* and incorporates the Anishinaabe way of doing, being and seeing and is interconnected to every living thing, as a

relative. By living this way, we will create balance and harmony in our lives (DD, Personal communication, May 2022). Finding a balance is a fundamental aspect to consider for LPFN. It encompasses the harmonious coexistence between the people, Mother earth and spirituality. Bringing balance to address the challenges discussed, involves respecting and preserving the land, knowledge systems, and cultural practices. In this context, balance means maintaining a sustainable relationship with the land and honoring Anishinaabe knowledge systems and ensuring the well-being of future generations. As mentioned by one participant *“It’s the environment that’s really important, and we need to combine our teachings and it’s an urgent matter. The climate, its pollutions, things like that, we need to start investing in our teachings and things, finding that balance”* (LPFN 3, July 2021).

Mother Earth offers everything necessary for a sustainable lifestyle that fulfills all the basic needs of our survival. The direct interconnection between Mother earth and the pursuit of balance and harmony, significantly contributes to the process of successful land-based learning. As an Anishinaabe woman, I use my medicines to bring balance and I utilize ceremonies regularly to create the momentum of living a good life, which in return heals me and brings me to a place of feeling balanced once again. Mother earth also needs to be in balance. As Anishinaabe people it is our innate responsibility to bring this forward and take action to help assist the land, so that in return she can be balanced once again.

When discussing solutions to address the challenges, it is important to understand how for Anishinaabe people finding a balance is a concept that encompasses personal experiences and is deeply rooted in the land. Therefore, it is a fundamental principle that guides their way of life and understanding of the world around them (Fontaine & McCaskill, 2022; Iseke, 2013). The pursuit of balance for Anishinaabe people involves harmonizing various aspects of living a good life, including relationships, spirituality, and the land. This holistic approach recognizes the interconnectedness of all things and emphasizes the importance of maintaining well-being. As well as bringing balance back to the land, where land-based initiatives can surely assist.

6.3.3 Trust the Process

Trust the Process is closely linked to building relationships. When we trust the process, we demonstrate faith in the journey, and we begin to understand the steps involved in developing

and nurturing relationships. (DD, Personal Communication, May 2022). By trusting the process, we show a willingness to let things unfold naturally and allow for growth and development. This mindset fosters open communication, mutual respect, and a deeper understanding of one another, which are essential elements in building strong and meaningful relationships. It is through this trust that we find the motivation and resilience to keep pushing forward, even when faced with obstacles. Trusting the process allows us to fully immerse ourselves in the work in progress, embracing the experience to building trusting relationships. At the beginning of the first participants interview she mentioned, “*Yeah trust, I still have trust issues. But I’ll just leave it at that for now*” (LPFN 1, May 2021). It is essential to recognize that being Anishinaabe does not inherently guarantee trustworthiness. As a visitor, it was necessary for me to actively cultivate trust when establishing meaningful connections in LPFN.

Trust is necessary for fostering wellbeing, and it is proven to be mutually beneficial for relationship building, establishing safe spaces, and facilitating successful and supportive approaches to community capacity building efforts (Lansing, et al., 2023). By prioritizing trust, we can explore solutions that effectively address the challenges at hand, to successfully implementation land-based initiatives in LPFN. To address the challenges and identify viable solutions, it is essential to thoroughly examine cultural revitalization, empowerment, LPFN participation, partnership building, and ongoing progress for LPFN. By carefully considering these factors, we can develop effective strategies and initiatives that promote cultural revitalization and land-based learning.

6.4 Current Initiatives to Address Solutions to Land Based Education

Food Knowledge Network Building was the most cited theme by participants, which includes 1) Stewardship of the Land; and 2) Community and School Collaboration. The most common sub-themes for this category represent a variety of ways in which participants reported on current initiatives, that are actively addressing solutions to land-based learning. These include a) Food security Programming; b) Medicine/Food Harvesting; c) Organic Gardening, d) Methods highlighting food knowledge systems and traditional practices (International local source, Wild meat access, Intertwined Teachings-Food Network, Women’s medicine plant uses, and Basic Healing formula knowledge).

Table 5 Frequency of Themes Related to solutions to address challenges associated with current initiatives in LPFN

| Outcomes perceived by participants | #Quotes | # Interviews |
|---|----------------|---------------------|
| Food Knowledge Network Building | 14 | 9 |
| Stewardship of the Land | 15 | 9 |
| Community& School Collaboration | 3 | 2 |

6.4.1 Food Security Programming

Current initiatives need to be fully implemented to address the solution to food security programming in the LPFN community. These initiatives aim to ensure that community members have access to affordable food and nutritious food all the time (DD, Personal communication, April 2022). Food security programming in LPFN purposely works to ensure access to food for all community members. By implementing viable solutions, these initiatives strive to engage the community in efforts to mitigate against food insecurity. As mentioned by one participant, *“I believe food security would be the strongest initiative. Also, the youth, to inspire the youth, engage them more. And also, more cultural teachings, because in order to teach our cultural teachings you have to go back to the land. There’s no going around it, most of our cultural teachings is land based so that would be it”* (LPFN 5, July 2021).

Food security initiatives are closely connected to youth engagement and cultural teachings which all promote land-based learning. By involving youth in these initiatives, we can empower them to become active participants in ensuring food security for LPFN. Through land-based learning, they can gain valuable knowledge about sustainable practices, traditional food systems, and the importance of preserving and respecting the land. This not only helps to address food insecurity but also strengthens cultural connections and promotes intergenerational transfer of knowledge. By investing in youth engagement and land-based learning in LPFN, we can create a more sustainable and resilient food system for future generations to come.

Through various strategies such as promoting sustainable practices, improving how food knowledge systems are shared, and enhancing nutrition education, and food security programs in LPFN work towards creating access to affordable food all the time, for their members. By involving the community, these initiatives can foster a sense of responsibility and empowerment,

leading to long-term positive change in addressing food security issues. By promoting sustainable practices, and improving infrastructure for food production and distribution, and enhancing community engagement, these initiatives will strive to create a more resilient and food-secure community (Islam, et al., 2017; Mihesuah & Hoover, 2019; Poirier & Neufeld, 2023). Through collaborative efforts and innovative approaches, LPFN is working towards a future where everyone in the LPFN community has access to nutritious food and can thrive in all areas of their well-being.

6.4.2 Medicine/ Food Harvesting

Medicine/ Food Harvesting is a vital aspect of traditional healing practices and everyday way of life for Anishinaabe people. It encompasses a wide range of knowledge and techniques passed down from generations (DD, Personal Communication, December 2023). Harvesting medicines extends to address food security and environmental sustainability. Local initiatives are essential to reducing food insecurity, with the added benefit of improving the well-being and food security of LPFN community members. This type of programming can also contribute to the strengthening of communities by promoting the use of traditional medicines and harvesting methods. As mentioned by one participant *“I go pick sage, I picked four hundred sage bundles and gave them away all over the place. I went to B.C, Newfoundland, and all over, and I didn’t do it for money, I did it to help people out”* (LPFN3 July, 2021).

For the past two years, I have harvested sage from LPFN. Some of the sage is two feet long and healthy at harvest season. Similar to the participant, I gather and harvest these medicines to utilize through sharing with others. Through reciprocity, and the barter system, I obtain other medicines that have been harvested that will help benefit my overall well-being. Picking medicines and harvesting also promotes my self-determination as an Anishinaabe women claiming my inherent right to practice my Anishinabe sovereignty.

The use of medicinal plants and the act of harvesting is a common practice for LPFN community members, as these standing tall people are believed to possess healing properties. Additionally, the importance of harvesting foods cannot be overstated as the goal is to become a food-secure community. This practice not only ensures sustenance but also maintains a deep connection with the land and promotes a more sustainable way of living (Mashford-Pringle &

Stewart, 2019; Robidoux & Mason, 2017; Tsuji & Liberda, 2020). By actively working to preserve these Anishinaabe food systems, communities such as LPFN can continue to benefit from the medicines and the harvesting of traditional food.

6.4.3 Organic Gardening

Organic Gardening means to cultivate plants without the use of synthetic pesticides or fertilizers (DD, Personal Communication, July 2022) and understanding the principles of organic gardening can greatly contribute to the initiatives for food sovereignty within LPFN. By embracing organic gardening practices, LPFN can foster a sustainable and self-reliant food system that respects the land. As mentioned by one participant *“In the process we wanted to have an organic garden or create an organic garden down the hill. We have an apple orchard, a tree orchard, and medicine garden to transplant some of our medicines that grow locally, and some that grow far away, so we can have a local source, so we don’t have to travel as far”* (LPFN8, May 2022).

This knowledge empowers Indigenous communities to reclaim their traditional food systems, promoting cultural preservation and enhancing their food security. To prioritize organic gardening in LPFN, would fully support the goal of food sovereignty initiatives. The objective of LPFN community is to cultivate their own food, aiming to enhance self-sufficiency, preserve the land, and foster greater community participation. By growing their own food, they can strive to reduce their reliance on external sources and promote sustainability (Ball, et al., 2008; Coppola & McHugh, 2018; Malandra, 2023). Organic gardening is a viable and environmentally friendly practice that can greatly benefit the LPFN community. Organic gardening promotes a healthy ecosystem, healthy soil, and the production of nutritious and local food. With the promotion of similar initiatives, it would surely overcome challenges and empower LPFN to take control of their food sources, promote self-sufficiency, and preserve their traditional food systems. Through organic gardening, LPFN can nurture their connection to Mother earth and ensure the well-being for the whole community.

6.4.4 Methods highlighting food knowledge systems and traditional practices

International local source, Wild meat access, intertwined teachings-food network, Women’s medicine plant uses (as mentioned in 4.1.3), and Basic Healing formula knowledge

(mentioned in [4.1.4.](#)) all highlight food knowledge systems and traditional practices. The knowledge of sourcing local food, including wild meat, emphasizes the connection to the land and the sustainable use of resources. Intertwined teachings- food network plays a crucial role in preserving and promoting Anishinaabe food systems. Additionally, women's medicine and the use of plants for healing purposes are integral parts of the LPFN community as mentioned amongst all chapter of the study. Overall, the knowledge and practices related to these topics contribute to the need and promotion of current food focused initiatives in LPFN. As mentioned by one participant, *“So, a lot of those plants we call the standing medicine people, but beyond that what you don’t see is the mycelium underneath the ground, which is the food network of the universe of the whole plant life, the mushrooms, the fungi’s”* (DD, Personal Communication, September 2022).

Throughout this study it has become increasingly apparent that Indigenous food systems can be regarded as a form of medicine that greatly contributes to the overall well-being of the LPFN community. These systems originate from the depths of Mother Earth, providing nourishment, that goes far beyond mere sustenance for LPFN. The traditional knowledge systems and practices associated with LPFN’s food systems offers a holistic approach to health and wellbeing, recognizing the interconnectedness of our physical, mental, and spiritual well-being.

Indigenous communities are actively working to restore their relationship with their land through the revitalization of Indigenous food knowledge systems. By reclaiming traditional practices and knowledge related to food, these communities are reconnecting with their cultural practices, while promoting sustainable and holistic approaches to land management through food networking. Through initiatives such as seed saving, traditional gardening techniques, and the preservation of traditional recipes. This work is crucial in preserving Indigenous cultures and promoting environmental stewardship (Coté, 2016). In order to effectively address the challenges of land-based education in relation to current initiatives in LPFN, it is crucial to acknowledge the vital aspects encompassing food, knowledge, network building, medicine, organic gardening, as

well as the sourcing of wild meat and access to international and local food networks. These intertwined teachings within the food knowledge network of capacity building, contribute significantly to these food knowledge systems, related to land-based education.

6.5 Stewardship of the Land

Stewardship of the Land was the second most cited theme by participants. The most common sub-themes for this category include a) cultural rediscovery b) Hands on approach c) Innate responsibility d) sharing/reciprocity e) blessings/abundance and f) Elder/mentorship guidance.

6.5.1 Cultural rediscovery

Cultural rediscovery is mentioned in 4.1.1 and again in 5.1.1 because this theme is at the forefront of land-based learning initiative's, related to the challenges but more importantly it actively addresses the challenges with viable solutions. This reoccurring theme and sub-theme of cultural rediscovery is directly connected to food knowledge for Anishinabe people, and it is vital for securing a place and space in today's system and on the land, while providing access to youth in LPFN community to learn effectively.

As this generation of students become increasingly interconnected through cultural rediscovery, guidance, and mentorship, understanding their Anishinaabe culture, they will essentially be set up for a successful integration on collaborating, as well as education on the land. Cultural guidance helps Anishinaabe students navigate unfamiliar territories, fostering mutual understanding and appreciation for the land. Cultural guidance through knowledge keepers, encourages students to build bridges, break down barriers, and create environments where Indigenous perspectives can thrive and be passed down from generation to generation. (Absolon, 2011; Fontaine & McCaskill, 2022; Matthews, 2011; Pimachiowin, 2012; Wheaton, 2000). By embracing cultural guidance, LPFN can ensure that everyone has an equal opportunity to contribute and succeed in their cultural practices, as well as a quality education, which ensures stewardship of the land.

6.5.2 Hands-on Approach

Hands on Approach as mentioned in 6.3.1, how land-based activities are grounded in this experiential-based experience that promote a holistic pedagogy that supports land-based

initiatives. As mentioned throughout, a hands-on approach to experiential land-based learning also involves recognizing the importance of patience and perseverance, as well as embracing the journey towards success. By staying committed and dedicated to a hands-on approach to land based education initiatives, LPFN can make significant strides in their active efforts, contributing to the growth and development of the LPFN community.

6.5.3 Innate responsibility

Innate responsibility is mentioned in 4.4.3, which speaks to how Indigenous peoples are the inherent stewards of the land. As an innate responsibility of Indigenous peoples, it is their obligation to protect and care for the land that has been entrusted to them. This responsibility is deeply rooted in passing on their traditional knowledge systems to their children. When LPFN youth learn about their inherent responsibilities, they will begin to understand the interconnectedness of all living beings and the importance of maintaining a harmonious relationship with Mother earth. As mentioned by one participant: *“My own children inspired me... I know it’s going to benefit my grandchildren. Because it does pull on my heart strings, that maternal bond...But what pushes me is knowing that it’s for my grandchildren”* (LPFN 2, 2021).

Our innate responsibility as Anishinaabe people consists of the intertwining teachings of our traditional knowledge systems, starting from birth and continuing throughout adulthood. These teachings guide us in understanding our place in the world, our connection to Mother earth, and our obligations to our community and future generations.

Indigenous people have been here since immemorial, and hold innate knowledge, given to them by Creator, and it is their mission to balance their gifts to create a more sustainable environment for their children. All life depends on Mother earth, as she provides us everything necessary for survival. Therefore, it is also imperative for this way of thinking to be understood, and fully embraced for the coming generations (LaRiviere & Crawford, 2013; Leach, et al., 2020). From a young age, Indigenous communities aim to teach the importance of identity, language, respect, reciprocity, and stewardship of the land. As Indigenous people grow older, they learn more sacred elements that encompasses the significance of preserving their language, culture, traditions customs and food practices on the land, passing them on to the next

generation. When LPFN passes their innate knowledge on to the youth, they are given the opportunity to carry it forward.

6.5.4 Sharing Reciprocity

Sharing Reciprocity, Blessing and Abundance was mentioned twice, and Elder mentorship guidance was mentioned once by one participant which is significant to this study examining land based learning initiatives and solution to address the challenges. Indigenous reciprocity, blessing, and abundance hold significant importance in fostering harmonious relationships and sustainable communities such as LPFN. As mentioned by one participant: “*My good friend, my teacher, he told me when I go into the grocery stores bless the food, bless the meat, because your blessing it for other people, your clearing that energy from it because someone picks up food they have energy they put it down. So, he said when you pack your groceries in your vehicle, pray over it and take that energy out of it. And always pray over your food, and thank the spirits for it, and thank the people who made the food and the people who grew the food. When we bless our food and take our energy out of it, that’s how we move forward. In terms of reciprocity, definitely hunting, when we were growing up my dad provided everything for us, we had elk, deer. We had moose, rabbit, prairie chickens. We were fed all those proteins, so that was our way of life, now it’s different. What affects that is, there is occasionally I’ll pay someone to get me a deer and you know they will render it and bring it here and chop it up or whatever, or someone will bring me elk, or fish.... So that stuff it doesn’t come freely anymore. Now, I have to pay for it, because you know gas, so I think about that when I buy off them. So definitely having access to that wild meat, it’s not easy as it used to be” (LPFN 5, 2021).*

It is apparent that we all have the ability to bestow blessings on the food we eat, as this has been an ancient practice for Anishinaabe people. Sharing and following reciprocity protocols are also necessary, which we learn from our Elders on the land as described by the participants father who provided for his family through sharing, which created abundance for the family.

Indigenous communities have a profound and reciprocal bond with Mother earth. This relationship is characterized by sharing, reciprocity, balance, and a deep understanding of the interconnectedness between all living beings. Through practicing their traditional knowledge

systems on the land, Indigenous people continue to demonstrate a profound stride to maintain a balanced and sustainable future (Abas, et al., 2022; Pickering, et al., 2010; Wildcat, 2014). LPFN recognizes Mother earth as a source of sustenance, knowledge base and spiritual connection. It is through the land then, that the abundance flows, providing a foundation for traditional practices and way of life.

6.6 Community and School Collaboration

Community and School Collaboration was the third most cited theme by participants. The most common sub-themes for this category include a) land-based structure building b) school wellness project and c) community involvement. These sub-themes are meshed into one for this section because they were mainly mentioned in one interview. This theme was brought forth for the purposes of noting the significance to community collaboration and collective initiatives, such as wellness projects that are directly addressing the challenges with viable solutions. As mentioned by one participant, *“It’s called the school wellness project. Wellness because we want more community involvement...we are putting an extension to the school, if you look at that picture on the wall there. This is the original school so this is where you came in, this is the extension where putting on and a larger kitchen, where students can be taught home economics. A little space here, also chairs and tables for feeding people and a walk-in fridge and walk in freezer”* (LPFN 8, May 2022).

Collaboration between the LPFN community and the school has the potential to significantly enhance sustainable efforts to learn on the land. By working together, LPFN can harness the strength to address the challenges and further promote community partnerships. Again, this reiterates how land-based initiatives are indeed innovative solutions which actively engage community.

Indigenous communities are actively constructing local structures to reclaim their territory, revitalize their cultural values and responsibilities, and preserve traditional knowledge systems for the benefit of their overall education and wellness. (Nightingale & Richmond, 2022; Kanu, 2006). This initiative showcases their dedication to preserving and passing down their cultural practices and value systems for future generations

Indigenous people in Canada, including LPFN have faced numerous challenges as mentioned in Chapter 6, including the loss of culture, lack of intergenerational transmission of knowledge, lack of food security, and lack of access to land. In direct relation to those barriers just mentioned, it is important to meet the land-based learning challenges head on. By doing so, LPFN can gain valuable knowledge and experience that will help their community grow and adapt in an ever-changing society. Embracing these challenges will allow LPFN to develop resilience, problem-solving skills, and a deeper understanding of their food knowledge network building capacities, stewardship of the land and community and school collaboration. It also provides an opportunity to connect with Mother earth, learn about their traditional ways, and foster a sense of stewardship for the land. By facing these challenges directly, we can pave the way for a more sustainable and harmonious future for all.

6.7 Community Based Participation

Community Based Participation was the most cited theme by participants, which includes under this theme. The sub-themes for this category represent a variety of ways in which participants amplify the call out, for Elder-Youth initiatives taking place on the land. These include a) early learning and implementation, b) learn through doing, being, and seeing and c) year-round food initiatives, the most common sub-themes of community-based participation include community school collaboration, opportunities and support for Elder-youth connection, LPFN family participation, and Elder leadership consultation.

Table 6 Frequency of Themes Related to solutions to address challenges associated with suggestion of Elder-youth connection in LPFN

| Outcomes perceived by participants | #Quotes | # Interviews |
|---------------------------------------|---------|--------------|
| Community Based Participation | 31 | 8 |
| Early Learning & Implementation | 10 | 6 |
| Learn through Doing, Being and Seeing | 8 | 6 |
| Year-Round Food Initiatives | 7 | 3 |

6.7.1 Community school Collaborations

Community school Collaborations mentioned in 6.6, is key for the promotion of land-based education for student's success. Getting together, sharing knowledge, ideas, expertise and planning for successful outcomes is at the forefront of how the Elder-youth connection flame can be re-lit (DD, Personal communication, June 2022).

Community School Collaborations is one of the foundations to meeting successful addressing viable solutions, when implementing land-based education. This study suggests that for effective methods to innovative shifts in regard to Land based education, it is imperative that it will take the momentum of the Elders, youth and community, as a whole, to find sustainable solutions. As mentioned by one participant: *"If we started getting the school more invested in initiatives, I think students should be able to come down at the end of the school year and start growing little gardens and then when school starts again. Guess what? There they are, and then we have an Elder come in and they share their teachings. If we had an Elder teaching about preserving and everything, recapping on things those can become our instructors later on, when we show our youth"* (LPFN 3 July 2021).

Collaboratively sharing expertise between the community and schools is a powerful demonstration of Anishinaabe sovereignty as we collectively strive to reclaim our rightful position in education and on the land. Community school collaboration is a participatory method that contributes to the knowledge base of enacting Indigenous knowledge systems focused on reconnecting Indigenous youth to land-based teachings. This, in turn, ignites positive changes related to identity, belonging, and well-being. (Fellner, 2018; Kanu, 2006; Redvers & Blondin, 2020; Snow & Obed, 2022). Collaborating with educational institutions serves as a method to reclaim traditional knowledge systems, where land-based teachings are facilitated by Elders, knowledge holders, and the youth themselves.

6.7.3 Opportunities/Support for Elder-Youth Connection

Opportunities/Support for Elder-youth Connection is also discussed in 4.2.3, which examines how investing in the young people, provides access to land-based education, opportunities, and cultural support by the Elders. Elder-youth connection can assist LPFN youth to gain the tools necessary to successfully be productive members of society, as well as

knowledgeable in their culture, which promotes sustainability in all areas of their lives. As mentioned by a participant *“So if we get people I can go into the schools and give them a glass jar or they can bring their own and out a seed in there like a bean and watch it grow and sprout and take it home so they can have their own beans...I can plant raised beds and have those young kids plant their flowers in here, or plant their food in there, or have every so often have them come and water and weed those plants. If I had nursery kindergarten they can learn, part of patience, right? And some kids are good at it and then they will have a green thumb. And they will start to learn and have an interest in it because they will start to see the plant grow, they nourish the plant they take care of it and they have fruit that they can eat it at the end, so that’s a whole process of learning and it take time and patience to do so. That’s what the value is, that is your teaching, not only the knowledge, but that’s a part of all of it... so that’s how it’s suggested that we revitalize our ways ensuring that our youth get to know.”* (LPFN 8, May 2022).

It has become increasingly apparent then, that in order to overcome the challenges it is essential for LPFN to create opportunities to support the youth. This means organizing workshops, programming, initiatives, events, celebrations and ceremonies related to land-based opportunities, where Elder-Youth connections can take place, to help ensure the passing down of intergenerational transmission of knowledge. This is key to ensure the implementation of land-based education within the LPFN community.

Highlighting the significance of opportunities and support needed to revitalize the participatory land-based Elder-Youth connection is a vital piece for fostering intergenerational knowledge exchange and cultural preservation. By integrating traditional knowledge systems with formal education, these collaborations provide a holistic approach to learning that is culturally relevant and fosters a strong connection to the land. The Elder-Youth connection not only enhances academic achievement but also promotes cultural identity, self-esteem, and overall well-being among Indigenous youth (Fast, et al., 2021; Sutherland, 2005; Sutherland & Swayze, 2012). Recognizing the importance of the Elder-Youth connection is essential for supporting the educational success and cultural preservation of LPFN’s Indigenous food systems.

6.7.4 LPFN family Participation

LPFN family Participation as mentioned in 6.2 and 6.2.1 can promote connections between Elders and youth in the community, bringing numerous benefits. LPFN family participation fosters intergenerational relationships, promotes understanding between different age groups, and creates a sense of unity within the community. By actively engaging in these land-based learning initiatives, families can contribute to their overall wellbeing. As mentioned by one participant: *“I think that goes back to family circles. Some of our Elders are very knowledgeable in terms of teaching but also in terms of food and gathering and story you know a lot of good hunting stories. And I think that it goes back to those family circles it's like myself...my Dad also seen in me that I had certain gifts, if I sat there and listened when he sat around with people. I sat there and listened, and I am carrying forward some of that knowledge now, thank god he did that, thank god I took the time. As a young child I took the time to go sit with Elders because I'm so nosey, but I'm glad I did. Going back to parenting and going back to family circles, that's where that needs to happen. But a lot of youth, when I take my girl to ceremonies, they're on their phone, and I say no, put that away, I brought you here to listen. That approach, that has to come through the family”* (LPFN 6, July 2021).

My mother's family and her deep connection to her homeland has inspired me to delve into my Anishinaabe identity. My family influence has been instrumental in guiding me on this meaningful journey of self-discovery. Which has ultimately led me back to my roots on the land.

Indigenous family-based participation is a system where decisions and leadership are rooted in the family structure of Indigenous communities, such as LPFN. This form of relationship alliance emphasizes the importance of family ties, traditions, and values in decision-making processes. It often involves Elders and community members coming together to discuss and address issues that affect the entire community (Castleden, et al., 2012; Grimwood, et al., 2012; Reed & Diver, 2023). By encouraging participation in the family unit, LPFN community can preserve their traditional knowledge systems on the land.

6.7.5 Elder Leadership Consultation

Elder Leadership Consultation as mentioned in 5.1.2, as well as 6.2.4 plays a fundamental role in enhancing community capacity and fostering a strong sense of self-identity. It is essential

to recognize the valuable insights and knowledge that Elder leadership brings to the table, as they contribute significantly to the development and cohesion of the community, specifically related to Indigenous food systems and land based education.

6.8 Early Learning and Implementation

Early Learning and Implementation the second most cited theme by participants. The most common sub-themes for this category include a) intergenerational transmission of knowledge, b) early middle years implementation, c) generational healing and d) learning modern technologies and embrace diversity.

6.8.1 Intergenerational Transmission of Knowledge

Intergenerational Transmission of Knowledge as mentioned in 4.1.1 and 6.1.3 pertains to understanding the preservation and continuity of traditional knowledge systems and practices. This process involves the passing down of knowledge, skills, and values from one generation to the next, ensuring the preservation of their Anishinaabe identity. By exploring how knowledge is shared and maintained across generations, LPFN can gain insight into the resilience and richness of who they are.

6.8.2 Early Middle Years Implementation

Early Middle Years Implementation consists of successfully Integrating land-based education into the curriculum, to provide students with a holistic learning experience that nurtures their connection to the land (DD, Personal Communication, May 2023).

Early implementation can also assist LPFN young people to develop a strong foundation of their traditional roles and responsibilities as stewards, shaping the youth into contributing citizens of society. Early exposure to land-based education can have a lasting impact on their values and behaviors, making it a vital component of holistic educational approaches. As mentioned by one participant, *“In fact, we are making room for a full time elder in the school. I'm trying to encourage my Phys Ed teacher to do only land-based learning, so we can do the hunting and trapping and those kinds of activities. In that way we would utilize that area a lot better and also planting and that kind of stuff”* (LPFN 9, May 2022).

Implementing land-based education initiatives in the early years is necessary for fostering cultural continuity and environmental sustainability for LPFN youth. By engaging children, youth and all participants in hands-on experiences on the land from a young age, we can instill a sense of purpose and belonging, as well as a sense of respect for the land, and ignite their innate desire to protect Mother earth for the future generations.

Implementing land-based education for early middle years students is a valuable approach that can enhance their learning experience. By incorporating curricular initiatives related to land-based activities, students can develop a deeper understanding of the environment and foster a sense of stewardship. This holistic approach to learning not only promotes academic growth but also encourages physical activity and overall well-being (Hardiyanti & Ekadayanti, 2023; Scully, 2012). Implementing land-based activities at an early age can drive the LPFN youths' curiosity, encourage open-ended questions, and provide opportunities for them to experiment, and collaborate to achieve curriculum standards.

6.8.3 Generational healing

Generational healing as mentioned in 4.1.2 is a powerful form of healing that aims to tackle intergenerational trauma. This work is necessary for LPFN youth, in breaking the cycle of pain and suffering passed down through generations, allowing individuals and families to heal and thrive. By acknowledging and addressing the deep-rooted wounds carried from previous generations, generational healing offers a path towards healing, growth, and resilience for current and future generations in LPFN.

6.8.4 Learning Modern Technology and Embrace Diversity

Learning Modern Technology and Embrace Diversity as mentioned in 4.1.5 is highly advisable, when considering integrating culturally competent programming, as well as fostering Indigenous space, and drawing insights from both traditional and modern forms of knowledge.

Modern technology and the integration of diversity within an Indigenous framework should continue in LPFN, as an effective method to engage youth interests and advance educational objectives. As mentioned by one participant, *"I've been able to understand and communicate with the young kids through my grandchildren teaching me computers. As they are teaching me, that's the part I like, feeling like an equal instead of just being grandma. I think*

embracing the modern way of life, and not forgetting the old way of life too. To try to be diverse, likeminded, as spiritual as you can and respectful of others” (LPFN 5, July 2021).

Embracing diversity not only enriches our perspectives but also drives innovation and creativity. Together, these elements pave the way for a brighter and more inclusive future for LPFN youth, families, and community.

Combining Indigenous ways of knowing with modern learning methods can enhance engagement in learning, while also addressing environmentally sustainable solutions. This integration can contribute to the promotion of educational objectives, especially in the context of land-based learning, modern technology, and embracing diversity are essential components of a progressive community (Demssie, et al., 2020; Corwin, 2016). By fostering a culture of continuous learning and leveraging cutting-edge technology, LPFN can adapt to the rapidly changing system.

6.9 Learn Through Doing, Being and Seeing

Learn Through Doing, Being and Seeing was the third most cited theme by participants. The most common sub-themes for this category include a) inquiry based/hands-on learning, b) life skills building, and c) long term planning

6.9.1 Inquiry based/Hands on learning

Inquiry based/Hands on learning as mentioned in 4.2.1, 6.3.1 and 6.5.2 is an approach to learning, which can assist the youth in achieving progress in land-based initiatives. This proactive method involves direct involvement and practical engagement between Elders’ and Youth to drive advancements and improvements in various land-related activities. By taking a hands-on approach, individuals, and communities, such as LPFN can effectively address challenges, implement innovative solutions, and ensure sustainable solutions. Embracing this approach can lead to tangible results and contribute significantly to the overall progress and success of land-based initiatives. As mentioned by one participant, *“You have to start them young so they can carry on for a lifetime.... That’s more important and our youth need to learn how to do that, so we need to show our youth” (LPFN 8, May 2022).*

Immediate implementation of a hands-on approach to learning is necessary to further explore the suggestions for Elder-Youth connection, otherwise we are doing a disservice to our youth. I myself, has an opportunity to participate in a land-based program in grade 12, the exploratory, experiential based and inquiry based teachings on the land, changed me. It made me want to explore new ideas, be part of the change and enhanced my care for Mother earth. I had a yearning to learn more about my Anishinabe identity and responsibilities when I learned about sustainable practices. These are the hands-on approaches to learning that need to start at your own home fire.

6.9.2 Life Skills Building

Life skills building is a key element for fostering the youths' growth and empowerment. Equipping them with basic life skills not only enhances their personal development, but also prepares them for future challenges and opportunities (DD, Personal Communication, March 2023). Life skills will increase youth empowerment for several reasons. Firstly, learning life skills such as communication, problem-solving, and decision-making will encourage the youth to navigate through various situations effectively. Secondly, having a strong foundation in life skills enhances self-awareness and self-esteem, a sense of belonging and purpose. Lastly, the ability to handle challenges and adapt to different circumstances instills a sense of reassurance and belief in one's own capabilities. As mentioned by one participant, *"I made the choice to raise my boys and my girl here to learn about the good life, a clean life, I taught them as much as I could, to help them carry on in a good way and I made that choice"* (LPFN 6, July 2021).

This study acts a reminder that the younger generations represent the future leaders of our communities. Therefore, it is imperative to provide them with support in expanding their understanding of living a good life, in balance and harmony, while refining their fundamental life skills. This strategy will enable students to cultivate a strong sense of purpose, thereby enhancing their academic achievements.

Life skills play an essential role in empowering culturally enriched youth by fostering connections to self, relationships, community, and traditional knowledge systems. This, in turn, enhances resilience in the face of intergenerational trauma and loss of culture, encouraging them to seek support and access relevant services (Black & Bamblett, 2024). The service LPFN aims

to provide, invites youth to reconnect with the land. Exploring cultural connections with LPFN youth can significantly contribute to their social and emotional well-being, equipping the youth with basic life skills for their personal development in all areas of life.

6.9.3 Long Term Planning

Long Term Planning involves setting goals and objectives that spans over an extended period of time. It requires careful consideration of future trends, potential challenges, and opportunities related to land-based initiatives (DD, Personal Communication, March 2023). The process of long-term planning on the land, involves creating innovative strategies, sharing resources and knowledge, and establishing indicators to track progress towards achieving the desired outcomes. Land based Initiatives, specific to food systems that encourages Elder-Youth connection, will always consist of intensive long-term planning, because this process involves regular reviews to revisit the goal and necessary adjustments to ensure alignment with changing circumstances and priorities. As mentioned by one participant, *“If you take a 50 year old who’s never planted a garden, they want instant coffee fix and check on it every day to see if it’s growing. I told you, the gardening teaches you patience, how to care, how to organize. It teaches you how to properly care for that plant. So, it’s not just planting and getting food it’s the whole process the steps to the end journey, is just as important as the end result, right?”* (LPFN 8, May 2022).

I can relate to being actively engaged in long-term planning by establishing goals and objectives for myself, while I obtain my third degree in Indigenous governance. I also carefully considered the potential challenges and outcomes that may have seemed unattainable at one time. To trust the process and hold the vision, has been key to my success in all my endeavors, thus far.

Planning ahead is crucial for Elder-youth connection and youth empowerment on the land, as it allows LPFN youth to set clear goals, anticipate challenges, and make informed decisions for best outcomes. By proactively mapping out a path for growth and development, Indigenous youth can take control of their lives mentally, emotionally, physically, and spiritually and work towards achieving their aspirations with confidence and purpose (Ambler, 1998; Robidoux et al., 2023). Long-term planning strategies enhances local food capacity by

supporting traditional food harvesting efforts. By fostering these traditional practices, LPFN community members can cultivate advanced gardening skills. This, in turn, will strengthen their local food sustainability strategy under the guidance and engagement of Elder-Youth strategies.

6.10 Year-Round Food initiatives

Year-Round Food initiatives was the fourth most cited theme by participants. The most common sub-themes for this category include a) food sovereignty/grow your own food, b) year-round seasonal programming and c) Matriarchal food relations.

6.10.1 Food Sovereignty/Grow your Own Food

Food sovereignty/grow your own food refers back to section 4.3.2, 6.4.1, 6.4.2 and 6.4.3, which are discussed in detail concerning the development of sustainable Anishinaabe food systems that are culturally appropriate for LPFN and environmentally sustainable for the next generation.

Food sovereignty and growing your own food is necessary for ensuring communities, such as LPFN have control over their food systems, promoting local agriculture, and fostering sustainable practices. It empowers LPFN members to make decisions about what they eat, supports Elder-Youth connection, and enhances food security. As mentioned by one participant, *“Well what we have is the three sisters as our food systems, corn squash and beans and so I sometimes I plant pumpkin patches. One year I had 75 pumpkins, which I gave to kids, and they just loved our pumpkin patch because when they are ready, they can come and pick their own”* (LPFN 8, May 2022).

Throughout this study and through close Elder mentorship, I have acquired a substantial knowledge base regarding the concept of food sovereignty and the significance of cultivating one's own food.

Exploring the relationship between gardening and food security, as well as the application of food sovereignty, reveals the necessity of comprehending the profound ties to Indigenous peoples' land, resources, community, and traditional food systems (Delormier, et al., 2017; Fieldhouse & Thompson, 2012; Minkoff-Zern, et al., 2024). Food sovereignty and the practice of growing one's own food can foster community connections, especially in initiatives

focused on land-based activities that promote intergenerational interaction between Elders and youth in LPFN.

6.10.2 Year-Round Seasonal Programming

Year-Round Seasonal Programming is necessary for advancing food sovereignty among LPFN members. These initiatives play a key role in ensuring access to nutritious food and promoting sustainable agricultural practices. By supporting year-round food initiatives, LPFN members can enhance their food security and strengthen their communities. Through these efforts, they can work towards achieving greater self-sufficiency, building Elder-Youth capacities and resilience in the face of challenges.

6.10.3 Matriarchal Food Relations

Matriarchal Food Relations as mentioned in 4.1.3, explores the interconnectedness of matriarchal food relations with the historical role of Indigenous women as stewards of medicinal knowledge (DD, Personal Communication, June 2023). Matriarchal food relations are deeply rooted in the Anishinaabe people's traditional knowledge systems. These relationships center around the role of women in food production, preparation, and distribution within the LPFN community. As mentioned by one participant: *“With the fruit of those, like the squash and the pumpkin, when you open it up, that plant is a womb, so when you open it up you see the babies. So, we want to propagate those particular plants”* (LPFN 8, May 2022).

As a woman, I can identify with matriarchal food relationships and recognize the significance of acquiring these practices to inspire my children and enable them to explore their traditional food systems.

It is essential to prioritize the inclusion of Indigenous women in these environments, as Indigenous leadership traditionally operates within a matriarchal system of governance as they strive towards self-determination for their community (Miltenburg, et al., 2022). Land and food-based practices are influenced by matrilineal teachings. The process of growing, harvesting, and sharing food within Indigenous communities, such as LPFN offers avenues to Indigenous food systems initiative, connections between Elders and youth, and ultimately, effective land-based practices.

Summary

The first part of this chapter, *Table 4* works to effectively address the challenges related to land-based education, it is crucial to thoroughly examine the aspects of cultural empowerment and revitalization, LPFN participation and partnership building and a work in progress. These elements, when combined, can serve as valuable tools in tackling these issues head-on. It is important to acknowledge that this process is proven to work, although it is also constantly evolving and adapting to the needs of the LPFN community.

In the second part of this chapter, *Table 5* presents the ongoing initiatives aimed at addressing land-based education in the context of food knowledge network building. These initiatives encompass a magnified focus on food security programming, medicine, food harvesting, organic gardening, and other related sub-themes. Finally, it is discussed in *Table 6*, which provides a comprehensive overview of recommendations for the transmission of knowledge for Elder-Youth connection in the context of land-based education. It emphasizes the importance of community-based participation, early learning and implementation, year-round food initiatives, and to learn through doing, being and seeing, which aligns with the hands-on approach method. These elements are interrelated throughout this study to highlight how LPFN can effectively address the challenges faced within the community, as well as provide proactive solutions to effectively implement land-based education in the standard curriculum.

Chapter 7: Summary, Conclusions and Future directions

7.1 : Summary of Thesis and Keys Findings

Like many Indigenous communities, LPFN continues to encounter numerous barriers that hinder their ability to fully engage in land-based traditional food focused activities, including the limited access to cultural programming that is essential for the sustenance and celebration of their rich Anishinaabe knowledge systems.

By constructing upon an Indigenous research paradigm (Absolon, 2011), this qualitative case study methodology (Creswell, 2012) actively attempted to seek community voice and participation, in accordance with the LPFN's Anishinaabe protocols. This approach aims to comprehensively explore and analyze food knowledge, land-based education and curricular implementation that promote Anishinaabe people's way of life. Also, a thorough and careful examination of the data collected was retained. By adhering to the community-based research approach, the study ensures that the voices and perspectives of LPFN are given due consideration and are integrated into the research findings.

The purpose of this research was to explore teachings and perspectives of LPFN Elders, knowledge keepers, and community members in enhancing land-based learning and Anishinaabe food systems. Through interactive, relational, and reciprocal research approach with my LPFN community participants, I was able to understand their valuable insights and experiences that can also provide directions to future land-based initiatives. The original research plan was to include teachers, youth, and administrators, which was not feasible due to COVID-19 and pandemic related community restrictions after Fall 2020.

In Chapter 2, the literature review explored three inter-related themes related to research topic: 1) experiences of Land Based Education Programming in Manitoba: a need to move towards more community-based and led approaches to land based education, particularly when Indigenous community members are reclaiming their way of life, by learning off the land, 2) Indigenous food systems: the need to underscore and implement community's own Indigenous ways of knowing, including language, transfer of knowledge and holistic models that promote land-based programming, and 3) curricular strategies and Innovations for land-based learning:

the need to develop community-perceived Indigenous-food focused strategies and interventions that address barriers to land-based learning and strengthen self-determined food-systems.

The purpose of this research was to explore teachings and perspectives of LPFN Elders, knowledge keepers, and community members in building a vision for land-based learning focused on Anishinaabe food systems. The specific research questions were: 1) What are the important outcomes of land-based learning, with a focus on Indigenous food systems from community perspectives of LPFN; 2) What specific challenges of land-based learning experienced by the participants from LPFN; and 3) What potential strategies can be generated to improve the land-based outcomes and address challenges from the perspectives of LPFN community members.

As discussed in Chapter 3, this study utilized a community-based in-depth case study approach which included many visits to the community of LPFN in the last five years. During community visits, I was fortunate to gain guidance and mentorship from Elder David Daniels—the lead Elder, attended many cultural ceremonies, cultural events, harvesting trips for sage and conducted semi-structured interviews with seven knowledge keepers and two educators from LPFN. Throughout this transformative journey, I have not only acquired a philosophical understanding of Anishinaabe worldviews but enhanced my listening skills and acquired very unique, and respectful way of conducting community-based research by working for and with LPFN participants. My field notes were very instrumental in my exploration of the intricate connections and reciprocal relationships that LPFN members possess with their respective traditional food systems knowledge. This process has allowed me to develop emotional intelligence, by immersing and rediscovering myself in the depths of LPFN’s movement for cultural resurgence as an Anishinaabe community.

The outcomes of land-based learning, as expressed by the LPFN participants generates insight into the transformative power of this holistic approach to land-based learning which provides unique opportunity for LPFN youths to connect with their land, culture, identity, and community in close apprenticeship with local elders and community members. The outcomes for land-based learning for LPFN fosters a deep sense of belonging and a rediscovery of Indigenous knowledge systems through the intergenerational transfer of knowledge and active engagement.

This collaborative effort is instrumental in fostering a community that is empowered through active participation. By doing so, the focus of the community can be redirected towards positive strides in reclaiming knowledge of their Indigenous food systems (Kamal, et al., 2015; Kuhnlein, 2015; Kuhnlein & Chan, 2000; Miltenburg & Anderson, 2022). This path serves as a catalyst for the resurgence of traditional knowledge systems, which has been collectively recognized as pivotal by all ten participants. Furthermore, the outcomes of land-based learning not only contribute to the health and well-being of the LPFN community but can also serve as a testament to their collective growth and development. The participants' experiences highlight the importance of incorporating land-based learning into educational practices, as it promotes holistic development. (Mpofu, et al., 2023; Vecchio, et al., 2022), and a sustainable future, thinking seven generations ahead.

Chapter 4 delves into the various challenges associated with promoting land-based learning through participant's perspectives. The challenges of cultural guidance, affordable access to food at all times, results-oriented planning, as well as land-based development and community investment and support, were main barriers that were experienced by community participants. By understanding these challenges better, chief and council, leaders, Elders, knowledge keepers, families, educators, and administrators can work together to develop community-based and led strategies to address them and create an environment that fosters a deeper connection between local youths, elders, school, and community members with the land, leading to enhanced learning experiences and promote self-determined food systems.

Chapter 5 describes strategies that can address the challenges related to Land base education in LPFN by examining various aspects, such as cultural empowerment and revitalization, LPFN participation, and partnership building. These elements serve as valuable tools, and it is important to acknowledge that this approach to learning has proven to be successful. In the second part of Chapter 6, the community participants also highlighted the ongoing efforts in connection with land-based education and the systems pertaining to knowledge about their local food systems. Some of these ongoing efforts that community participants need to focus includes community food security programming, medicine picking, food harvesting, and the practice of organic gardening, which is consistent with findings of other scholars (Delormier, et al., 2017; Fieldhouse & Thompson, 2012; Minkoff-Zern, et al., 2024).

These initiatives emphasize the importance of these areas in the broader context of food and the land. The last section pertains to the recommendations for the transmission of knowledge concerning the connection between Elders' and youth, in the context of land-based education.

Overall, the summary and key findings highlighted by the participants, voiced a great importance on supporting the current need to upscale land-based food initiatives to address the complex challenges of food security, sovereignty and land-based learning, but also to promote academic success, well-being and sustenance for the future generations. The key findings establish a holistic framework that enables the development of a participatory Indigenous food-focused land-based model, which will further serve to demonstrate successful land-based learning outcomes in LPFN. It is noteworthy that this framework has the potential to contribute to the vision for the future preservation and promotion of LPFN's knowledge and practices related to food and the land.

7.2 Vision for future Indigenous-food focused Land Based learning: Suggestions & Recommendations

This final portion of the study's conclusion, summary and key findings highlight important recommendations that suggest the need for future support in strategies for land-based learning in LPFN. It emphasizes the significance of incorporating hands-on experiences and practical approaches to enhance learning outcomes. By engaging students in direct interaction with their Anishinaabe food systems, will promote a deeper understanding of stewardship of the land, future sustainability, academic success, as well as foster a sense of connection to who they are, as knowledgeable Anishinaabe people.

These recommendations underscore the importance of providing adequate support for the future generations in terms of, a) Elder-youth engagement, b) Indigenous food knowledge sharing, c) land-based implementation, d) healthy food advocacy, e) affordable healthy food access, f) funding support and g) basic rights advocacy, as voiced by all nine participants.

7.3 Elder-youth Engagement

Through Elder-youth engagement initiatives, LPFN envisions effective and impactful intergenerational transfer of Anishinaabe knowledge systems being significantly increased. Land-based improvements and programming needs to include the voices of the Elders, but also

the youth because each individual has their own skill set and contributions to creating equity. The Elders engagement and participation is the fundamental piece to the well-being of the community, in terms of land-based initiatives; access to land, availability of medicines/food and food security, cultural practices and intergenerational transmission of knowledge systems. As mentioned by one participant, *“DD he’s very knowledgeable when it comes to plants, and when it comes to other things related. We also have other Elders who are so good with carpentry, and then we have other Elders who are so good with beading and sewing, so if you have more Elder groups and you have more Elders just coming in and talking, and you find out what each is very good at. You find a way to bring them in”* (LPFN 4, Interview, July 2021). As mentioned by another participant, *“I’m trying to encourage my Phys ed teacher to do only land-based learning so we can do the hunting and trapping and that kind of activities. In that way we would utilize that area a lot better”* (LPFN 9, Interview, May 2022).

The Elder-Youth engagement is a holistic hand on approach that ensures the resurgence of their culture, while also allowing opportunities for the students to become knowledgeable in their food systems. While all nine participants shared their life experiences, rich cultural teachings and knowledges that enriches the LPFN community’s cultural memory. It is vital that their voice is valued by the community for the successful development of land-based programming.

Therefore, by valuing and incorporating the Elders' and young peoples voices, LPFN can create the balance that is needed to overcome the challenges experienced in land-based learning.

7.4 Indigenous Food Knowledge Sharing

Pivotal discoveries and recommendations were formulated to provide guidance for the growth and capacity building of LPFN’s food knowledge sharing. It is essential to emphasize the significance of oral teachings, storytelling, reciprocity and how knowledge is shared. Through the act of sharing, students can embody their cultural, historical, and pedagogical belief systems that also supports their own Anishinaabe land and food systems. Through sharing food knowledge, students, educators, and the community can foster a deeper understanding and become more knowledgeable in their traditional knowledge systems and practices, while also obtaining vital knowledge about sustainable land stewardship and resilience for the future

generations. This recommendation aligns with the overarching goal of creating a holistic educational experience that nurtures the connection between students and the land, ultimately contributing to the preservation and revitalization of Indigenous food systems. As shared by one participant their knowledge of local food systems, *“how do you propagate food, how to you divide tree, can you do stem cutting, can you do roots cutting, or do you need seeds? Perennials you plant them once, and they’ll be there, as long as they have the same environment. Annuals on the other side, you have to plant them annually, annuals will produce a plant then the second year will produce a seed, like an onion, right? An onion is a biannual right, so you’ll plant the onions and it will grow an onion, but it stores all its food in that onion bulb. If you leave it in the ground, the following year it uses all that energy that it’s stored the first year to produce the seed, that why it’s called biannual right? Whereas Mother nature has developed that so that we could have an abundance”* (LPFN 8, Interview, May 2021).

More knowledge is shared around LPFN’s local food systems by one participant, *“We have a constant rain of acorns one of the things they don’t do is pick up the acorns and dry them up. If you were to dry them up and soak them in water and leave them in water for two or three days keep changing the water keep changing that water, it takes all the bitterness out of it. Or you can dry it in the sun and when they are nice and dry you make flour. You ever have oak acorn pancakes? Yeah, so my friend gathers up all the acorns she can and processes then and dry’s them up and makes flour and has some of the best pancake mixes I know. Bulrushes you know there’s a specific term for bulrushes because the bottom part is the female part but right above it is the male part and it has pollen so what she dies is at the right time she goes out with her bucket and will go and collect the pollen and has bulrush flour and makes good bread out of it. You take the bulrush at the roots and take all the leaves out of it and you’ll have a footlong white stem and you pound that out and you have flour. Maple seeds, you can make maple seed flour, maples are a nuisance over here considered a weed. You can take the bark off the tree and the inner bark you can dry that and powder it and make flour. The white birch, there is so many medicines in that white birch, 20-30 medicines that come from soft birch”* (LPFN 8, May 2022).

Another participant made a suggestion for sharing food knowledge; have the LPFN community, *“Gather all your hunters and just put a call out and have a gathering of all the people that know about hunting and planting and get together”* (LPFN 4, July 2021). The participant also shares their local food knowledge by saying, *“And the three most important*

strategies, is understanding how plants grow, in what environment they grow, Mother nature doesn't have nice little neat rows for vegetables. And they all work together that's why the three sister's and our ancestors in ancients' societies used corn as a stalk for climbing plants like the beans, also provide nutrition. And when you put squash it provides ground cover and also provide moisture. People don't understand and realize if you just eat the squash that's one thing, but you know where the nutrition is it is the leaves and the veins...So it's a different perspective, the nutrition's are in the veins and the stems and the end result of all that is that the nutrition flows through the vein and through the leaves to produce the fruit, the pumpkin. Same thing with wild flowers, just when they just turn green and before they produce seeds, all Mother nature does, is put all her energies into producing that seed, so just before it becomes a seed and becomes open, you can take a look at that weed pod and if you're hungry and weak and out hiking you take the milk weed pod, you break it off and eat it and it tastes just like a cucumber. And all the nutritional content and all that energy is in that seed pod, so what are you benefiting from? Your benefiting from Mother nature's work. So, we don't understand that and that is what we need to share in terms of Indigenous food systems. The end product is just as important but more important what is happening to the whole seed process of how mother nature produces that seeds and sometimes it's in the roots, the stem the seeds, where they are equally important” (LPFN 8, Interview, May 2022).

It is then vital to recognize the positive impacts of sharing knowledge around Indigenous food systems in LPFN. Creating opportunities for students, the community, and all lifelong learners to engage in such teachings, will be a key aspect to consider, in relation to the future of LPFN's successful food focused land-based initiatives.

7.5 Land Based program Implementation

LPFN requires improved access to land and resources, safe zones, training, strategy planning and elder mentorship, for students, educators, and LPFN members, to ensure the successful, implementation of land-based learning initiatives. The future directions of this study were further validated and consolidated through community voice. One participant suggested a strategy for land-based learning implementation: *“The most relevant way is to have my own land-based instructor, and that person would involve the Elders' or people and the community*

would do those things that are being done, whether it be planting or making tools or anything such as that” (LPFN9 Interview, May 2021).

LPFN has already started to intertwine their food knowledge systems and land-based education in their elementary school. This exemplifies how students are able to reclaim their traditional knowledge systems, while simultaneously addressing the challenges of achieving academic success through land-based learning.

It was also mentioned as a goal for future implications for land-based implementation, *“Also utilizing the section of the school that we want to make cultural. Because children need to be involved... I want every student in the school to experience that. Sometimes when you experience something, and you enjoy it, that kind of sets that path on which way you’re going to go. It’s important to have a knowledgeable instructor for land-based learning, as well as utilizing Elders in the community”* (LPFN 9, May 2021).

The future vision and recommendations highlight the significance of LPFN’s land-based participation in early learning years of local youth in local year-round, food-focused land-based learning initiatives in LPFN, with hands-on approach. It is imperative to emphasize the importance of community involvement in the educational process, as it fosters a sense of belonging and enhances the overall learning experience (Johnson, et al., 2020). The implementation of such LPFN initiatives should be carried out in a comprehensive manner, including working with local schools. This will ensure a well-rounded land-based learning experience for the students, and community members enabling them to acquire knowledge and skills utilizing this holistic approach that supports traditional food systems.

7.6 Healthy Food Advocacy

The vision for future directions regarding healthy food advocacy is directly related to the lessons and experiences of land-based food-focused initiatives, as described by the participants. The participants experiences have provided valuable insights into the importance of encouraging healthy food, because this will create a larger knowledge based around nutritional intake, and for the overall well-being of the LPFN community. When creating a platform for healthy food, one participant mentions, *“People have to be interested in having long term survival. People say where does flour come from; they say Walmart. They don’t understand where it’s coming from.*

But they don't understand that my grandparents and mother made their own flour" (LPFN 8, Interview, May 2022). Also, a participant shares about healthy food alternatives for self-efficiency in our food systems, "people don't realize how gifted we are with all the plants that we have, and part of the process is learning how to do it ourselves. Picking berries isn't fun when all the wood ticks and mosquitoes are around but at the end of the day when you have five gallons of saskatoons that you can dry and can. I'm going to try freeze dry this year because all the nutritional content and taste is there and when it is properly prepared you can keep those berries for up to 30 years and have the same nutritional value as the day you processed them. We didn't have freeze dry, but we have air dry and my grandmother made saskatoon raisins and dried them up in the summertime and added water then made some saskatoon soup. Those things we haven't done, instead we run over to the store to get food that contaminated. If you take a look and research this, most contaminated food on the market, strawberries, this all has so much contaminants and chemicals have so much on there that you're eating poison. Some of those commercial food products that you buy in the store, if you go to Walmart there's a code with each one, if it starts with a nine it's a GMO, if it starts with other numbers it's not a GMO product. So, you got to learn to read the labels and look at numbers. It is convenient for them to buy without reading. We have to teach them how to coupon we have to teach them so much. That's part of my whole systems of educating people, they need to know, otherwise they are just eating themselves to death with all the chemicals we are using" (LPFN 8, Interview, May 2021).

The participants indicated that by rediscovering their ancient food systems, they can contribute to a healthier lifestyle, while also preserving their natural resources, promoting environmental stewardship, and by enhancing local food systems (Berkes & Folke, 2000).

7.6.1 Affordable Healthy Food Access

Access to affordable food is fundamental for LPFN. Ensuring consistent availability of nutritious and affordable food is essential for the well-being and health of all Indigenous communities. It is imperative that the main challenges of lack of access to healthy food is addressed and absolutely necessary to break the barriers that hinder access to these foods, while also working towards creating sustainable solutions that promote food security and sovereignty for communities, such as LPFN. As mentioned by one participant, *"if we have a budget increase,*

they can have some healthy food. The businesses out here should try to help to provide that” (LPFN 6, July 2021).

In order to have access to healthy and affordable food, it is imperative that collective community collaboration is initiated in LPFN. In terms of health and cost-efficient matters, it is recommended by the participants that the community be engaged in growing their own food. By engaging in such endeavors, they will pave the way for a future that is fortified with an assured and reliable food supply, thereby ensuring the food security in LPFN. Also mentioned by one participant, *“And also, we need strawberry farms or whatever also taking that holistic approach and take those ways of managing into the businesses and encourage our First Nations people. Out here, and in some of the stores in Portage. The store here, I pushed that they have affordable food, we shouldn’t be paying you know 7 dollars for a bag of carrots, and in portage they are on 2.99 in portage, we shouldn’t be paying outrageous prices at this store, the reason we wanted this store is because people can’t go to portage all the time, it’s only twenty mins away, but a lot of people don’t have access to vehicle’s, so that’s part of it having affordable and healthy food, that’s another thing”* (LPFN 6, July 2021).

7.6.2 Community Capacity Building through funding Support and Basic Rights Advocacy Community capacity building

Community capacity building through funding support and basic rights advocacy community capacity building plays a fundamental role in fostering positive outcome to meet the funding needs associated with LPFN’s Anishinaabe food systems, land-based education and the collective well-being of LPFN. As mentioned by one participant *“funding has always been a problem”* (LPFN 8, Interview, May 2022). These challenges require collaborative efforts and innovative solutions to create positive change and improve the overall success of land-based initiatives in LPFN.

Future recommendations regarding basic rights advocacy for LPFN community is critical for ensuring their well-being and empowerment. It is also imperative to prioritize the protection and promotion of their fundamental rights, including land rights, cultural preservation, and access to education and healthcare. as mentioned by one participant, *“I think to try and reach out to the younger people. Well, I know through my personal experience with my young friend, they*

are harmless. And on the street and they're just starting to learn what their rights are, and if they have any rights. So, I think that would be one of the main things to help advocate and teach the rights of people. And there is so many different levels of basic human rights. So, it's kind of like when you ask families 'Do you know your rights? Well what are those? So, there's a lot of

learning to do. That's why I said we have to reimagine the future" (LPFN 5, July 2021). It was also mentioned how we can advocate for basic rights through the calls to action, and progress by following the recommendations offered through efforts of, "Truth and reconciliation. But at the same time, we have to be part of the solution instead of being part of the problem. There is a time and place for everything. Certain time and certain place. So, I think we have to be respectful of all people and all living things" (LPFN 5, July 2021).

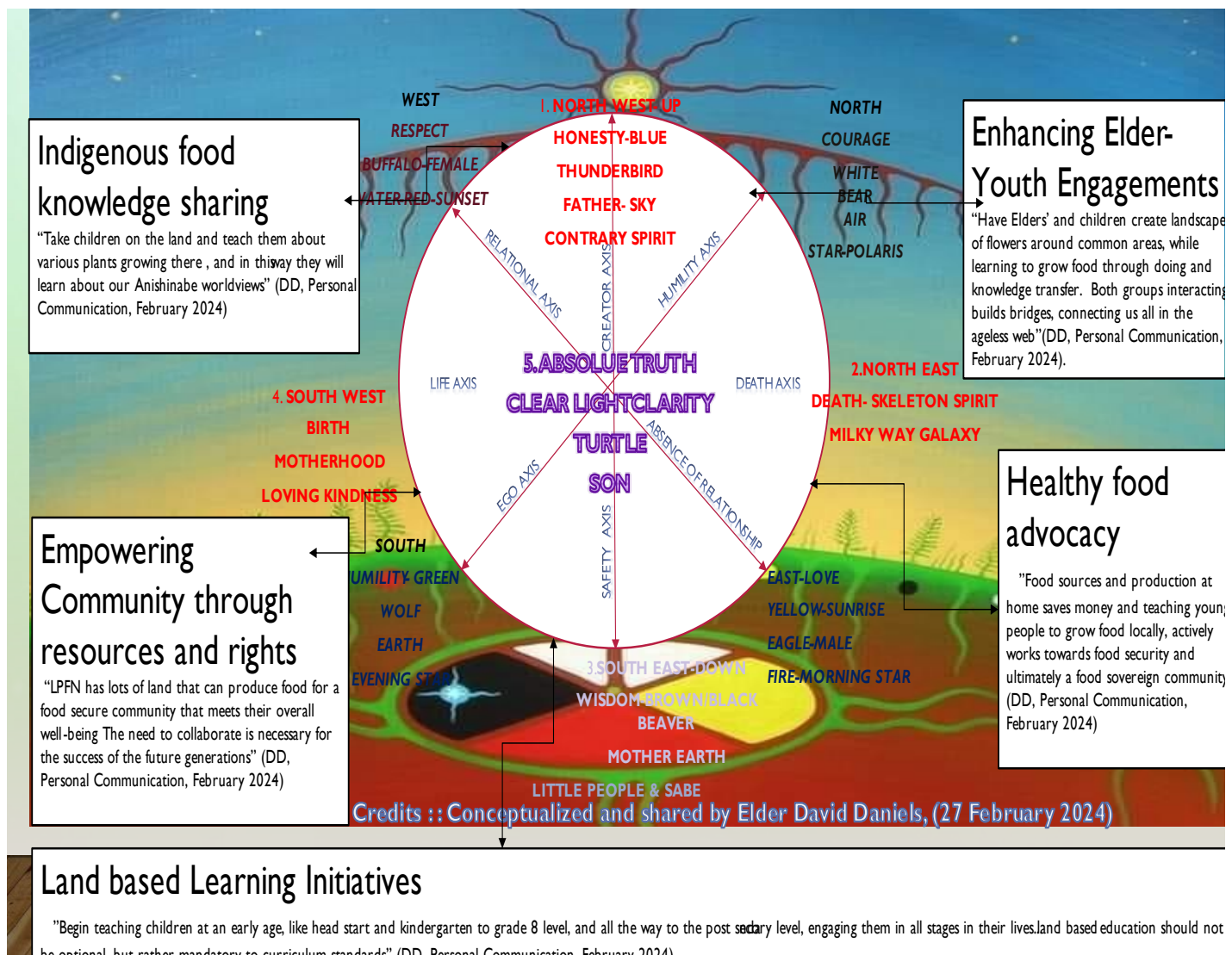
Efforts should be made to strengthen frameworks and policies that safeguard LPFN's basic rights, while also fostering participatory decision-making processes that involve the community. Additionally, raising awareness and promoting dialogue on these issues at local, national, and international levels can contribute to creating a more equitable future for LPFN. By recognizing and respecting the unique needs and perspectives of the LPFN community, they can work towards a future where their rights are fully recognized and upheld.

My community-based research demonstrates that revitalizing Anishinaabe food systems play an important role in LPFN's future land-based initiatives. It involves developing and managing various aspects of important living relatives and the land in LPFN. By considering factors such as environmental impact, sustainability, and community engagement, result-oriented planning is necessary to ensure that land-based learning activities are carried out in a responsible and efficient manner. This holistic approach allows for the effective utilization of LPFN's land and resources, while minimizing negative effects on Mother earth and promoting long-term benefits for both present and future generations to come. Through long term community collaborative planning that involve respectful Elders' consultations, mindful youth engagements and reciprocal school relationship can create a synergistic strength and can foster a sustainable and prosperous future for the future seven generations.

Successful strategies in the context of LPFN, includes engaging both Elder and youth,

promoting knowledge sharing, implementing land-based practices, and advocating for healthy food. By involving LPFN members from different age groups, the community can deepen their connections to Anishinaabe teachings, worldview, and life experiences. Sharing knowledge and experiences related to their food systems and land-based practices, can contribute to the overall success of LPFN's initiatives. Additionally, advocating for access to affordable and healthy food can help improve the community's overall well-being.

Figure 7.1: LPFN Vision for Seven generation: Community suggested strategies



As per the model, all five themes discussed earlier are presented weaves of different stages of life and interconnectedness. They also depict the inter-relationships and inherent responsibilities of Anishinaabe people (in relation to relatives) that they learn through intergenerational transmission of knowledge about their own Anishinaabe knowledge systems. To help this model work for the community and for current youth and future generations, it requires the active creation of land-based learning opportunities in the LPFN community at all levels. Various quotes provided by Elder David Daniels supports these themes and provides helpful directions to LPFN community, leadership and governments to enable the enactment of vision of LPFN's current and future land-based learning including a focus on future generational progress. Weaving of Anishinaabe worldview and pedagogies are central to the vision LPFN's comprehensive framework of land-based learning that can foster a self-determined present and future for the next seven generations. This holistic vision imparts important Anishinaabe teachings, values and principles which can empower LPFN community to lead lives of purpose, truth, and harmony with other relatives and Mother Earth and all of humanity.

Annexure 1: Anishinaabemowin terms for Figure 7.1

1. The Good Life (Mino-bimaadiziwin): Concept of living a fulfilled and balanced life according to Anishinaabe teachings.
2. Northwest (Giiwedin nisawayi'ii): Direction between North and West.
3. Up (Ishpiming): Movement towards a higher position or elevation.
4. Honesty (Gwayakwaadiziwin): Quality of being truthful, sincere, and morally upright.
5. Blue (Ozhaawashko): Color associated with the sky and water.
6. Thunderbird (Binesi): Sacred large bird symbolizing creation and strength in Anishinaabe culture.
7. Father Sky (Nibaba Gizhig): Spiritual representation of the sky in Anishinaabe knowledge system.
8. Contrary Spirit (Windego con): The backwards spirit representing contrary and excessive characteristics, and their work is to bring back balance in Anishinaabe tradition.
9. North (Kewatinung): Direction associated with winter/wind and wisdom in Anishinaabe astrology.
10. Courage (Zoongide 'ewin): Strength of character to face adversity and overcome fear, through bravery.
11. White (Waabishki): Color symbolizing purity, spirituality, and the winter season.
12. Bear (Makwa): Animal revered for its strength, knowledge of the medicinal and judicial systems, and protective in nature to Anishinaabe people.
13. Air (Aashi): Element essential for life, representing breath of life and spirit.
14. Star (Anung): Celestial body shining in the night sky, often associated with guidance and spirituality.
15. Polaris/Northstar (Kewatinung Anung): Motionless star used for navigation and orientation; it also represents home for Anishinaabe people.
16. Northeast (Nisawayi'ii Kewatinung): Direction between North and East.
17. Death (Nibooke): End of physical life; transition to the spirit world in Anishinaabe knowledge systems.
18. Skeleton Spirit (Jiibay manidoo): Spiritual entity associated with death and the afterlife in Anishinaabe traditions.
19. Milky Way/Galaxy (Jiibi mikaanaa): Cosmic pathway traveled by spirits in Anishinaabe astronomy.
20. East (Wabanung): Direction of the rising sun, symbolizing new beginnings and renewal.

21. Love (Zaagi'idiwin): Deep affection and care towards oneself, others, Mother earth and all living beings.
22. Yellow (Ozaawaakozi): Color representing sunrise, new beginnings, and birth in Anishinaabe culture.
23. Sunrise (Mooka'am): Dawn, marking the beginning of a new day and the renewal of life.
24. Eagle (Migiizi): Sacred bird symbolizing, love, messenger, and connection to the Creator in Anishinaabe knowledge systems.
25. Male (Ininew): Gender identity associated with roles and responsibilities in Anishinaabe culture.
26. Fire (Ishkode): Elemental force representing to wake up the heart (home fire), warmth, light, and transformation.
27. Morning Star (Wabanung Anung): Venus, celestial body visible in the eastern sky before sunrise.
28. South East (Nisawayi'ii Shawanung): Direction between South and East.
29. Down (Nissaweh): Movement towards a lower position or elevation.
30. Wisdom (Nibwaakaawin): Knowledge, experience, and insight gained through, self-discovery, understanding and reflection.
31. Brown/Black (Ozaawa/Makadewaa): Colors associated with earth, soil, and the night sky in Anishinaabe culture.
32. Beaver (Amik): Animal revered for its industriousness, wisdom, and importance in Anishinaabe culture.
33. Mother Earth (Nimaamaa Aki): Spiritual entity embodying the land, nature, and nurturing qualities in Anishinaabe worldview.
34. Little People (Memegweseewag): Fairy sized beings who live in the rocks, ground and waters, who have inhabited our world since the beginning of time.
35. Sasquatch (Sabe): Legendary creature, also known as Bigfoot, who is also a protector to the people and the land.
36. South (Shawanung): Direction associated with warmth, growth, and energy in Anishinaabe astronomy.
37. Humility (Dabasendizowin): Quality of being humble, modest, respectful, and grounded in Anishinaabe values.
38. Green (Ozhaawashko): Color representing vegetation, life, and renewal in Anishinaabe culture.
39. Wolf (Ma'iingan): Sacred animal symbolizing loyalty, instinct, and community in Anishinaabe culture.

40. Earth (Aki): Physical realm, land, and environment in Anishinaabe culture.
41. Southwest (Nisawayi'ii Shawanung): Direction between South and West.
42. Birth (Ondaadiziike): Process of bringing new life into the world; beginning of existence.
43. Motherhood (Nimaamaayag): Experience and role of being a mother, nurturing and caring for children.
44. Loving Kindness (Zhawenjige): Compassionate and caring attitude towards oneself and others.
45. West (Negabawanung): Direction of the setting sun, symbolizing completion, endings, and reflection.
46. Respect (Manaaji'idiwin): Admiration, esteem, and consideration for oneself, others, and Mother earth.
47. Buffalo (Mashkode Bizhiki): Sacred animal symbolizing abundance, strength, and sustenance in Anishinaabe culture.
48. Female (Kwe): Gender identity associated with roles of responsibilities associated with, nurturing, and intuition.
49. Water (Nibbi): Essential element of life, symbolizing purity, fluidity, and renewal in Anishinaabe culture.
50. Red (Miskozi): Sacred color representing life, energy, and is also the first color in the rainbow in Anishinaabe culture.
51. Sunset (Bangishimon): Evening transition marking the end of the day and the descent of the sun below the horizon.
52. Evening Star (Negabawanung Anung): Venus, celestial body visible in the western sky after sunset.
53. Center (Nawaway): Point of union or focus; central position or location.
54. Absolute Truth (Miziwewaabikizi Debwewin): Unchanging and universal reality; ultimate truth in Anishinaabe worldview.
55. Clear Light (Zhiibawaaseyaa): Radiant and transparent illumination; clarity and purity of perception.
56. Clarity (Bagakaabi): Quality of being clear, distinct, and easily understood; mental, emotional, physical and spiritual acuity and insight.
57. Turtle (Mikinaak): Sacred animal symbolizing truth, wisdom, longevity, and connection to the earth in Anishinaabe culture.

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