Generational advancement in sovereign nations: a qualitative study understanding the significance of knowledge infrastructure

George A. Vigil

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GENERATIONAL ADVANCEMENT IN SOVEREIGN NATIONS: A QUALITATIVE STUDY UNDERSTANDING THE SIGNIFICANCE OF KNOWLEDGE INFRASTRUCTURE

A dissertation proposal submitted in partial satisfaction of the requirements for the degree of Doctor of Philosophy in Global Leadership and Change

by

George A. Vigil

June, 2023

Martine Jago, Ph.D. – Dissertation Chairperson
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under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

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DEDICATION

This dissertation is dedicated to my grandfather, Arthur Valentine Vigil, whose courage and motivation have empowered me to seek an education for the betterment of our family and the indigenous communities globally.

I would like to thank my grandmother, Nancy Vigil, for being a remarkable woman. You have such a wonderful combination of warmth and kindness, laughter, and love. You showed me how to bless others and to be an advocate for change.

I would like to thank my wife, Dana Vigil, for her dedication, encouragement, and strength in fulfilling my research. Your ability to inspire me to fulfill my duties as a child of God, community member, friend, husband, and peer. You have shown me grace since I have met you and have accepted me for who I am, not what I was.

I would like to thank my mom, Bernadine Vigil, for being an example of a leader who has not succumbed to her struggles in life but has challenged adversity and has overcome life experiences with grit. You have given me a framework that has structured my pursuit of happiness.

I would like to thank my brother, Daniel Rodriguez, for his ability to help and serve greater communities in his work. This has provided me perspective and why it is important to be passionate about what you do and to seek social capital as another form of compensation.

I would like to thank my uncles, Arthur and Vincent Vigil, for their continued love and motivation to tackle adversity. You have inspired me to drive my efforts in help others win.

I would like to thank my father-in-law, Embert “Sonny” Stringer who has shown me the importance of looking towards a positive outcome when negativity overcomes your life experiences. You've have always treated me like your own child and I feel so grateful for that.
I would like to thank Martine Jago, Ph.D., Paul Sparks, Ph.D., and Dawn Dennis, Ph.D. for the continued pursuit in educating others and developing our current and future leaders.

I would like to thank my co-workers, friends, family, peers, and network that has enthused my dedication for completing this dissertation and showing a commitment that has helped encouraged me to fulfill another academic milestone.

I would like to thank Kevin Obillo, for always being there to encourage me when I felt discouraged. You are my chosen brother, and I am grateful for your continued support throughout my Ed.D. and Ph.D. journeys.

I would like to thank De Vida Gill, for her helping me through my cancer journey and for granting me the understanding to give myself grace. You are a great example of conquering adversities. I appreciate you telling me “You are not your cancer.” This has helped me gain strength is living life each day.

I would like to thank the participants of this study for their honest and raw responses which have helped me identify the importance of building knowledge infrastructure within sovereign nations.
DR. GEORGE A. VIGIL
PH.D., ED.D., M.S.S.C., C.S.C.M.
A PURPOSEFUL LEADER
From South Los Angeles

SUMMARY

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Pepperdine University, Ed.D.
Organizational Leadership
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Strategic Communication
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San Manuel Band of Mission Indians
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Adjunct Faculty, California Baptist University
Instructor, University of California - Riverside Extension
Adjunct Faculty, Pacific Oaks College
Core Adjunct Faculty, University of Redlands
MBA Leadership Mentor, University of Redlands
Adjunct Faculty, University of the People
Adjunct Faculty, Austin Peay State University
Adjunct Faculty, Garrett College
Academic Advisor, San Joaquin College
Senior Strategic Learning Success Manager, Yelp
Total SDI Facilitator, PSP Publishing
Market Manager, Coca-Cola
Sales/Marketing Specialist, Kingston Technology
Promotions New Media Manager, KWSO 100.FM
Product Supervisor, The Walt Disney Company
Promotions Manager, ABC Radio
Brand Consultant, Glacéau Vitamin Water
Brand Consultant, Nestlé
Legal Assistant, Paramount Pictures Legal
Executive Assistant, CBS Television
Marketing Promotions Manager, Entercom
Newsroom Coordinator, Fox News Channel
Teacher, City of South Gate

RECENT ACADEMIC PUBLICATIONS
Generational Advancement in Sovereign Nations: A Qualitative Study Understanding The Significance of Knowledge Infrastructure
Doctor of Philosophy Dissertation, Pepperdine University, ProQuest Publishing

Building Knowledge Infrastructure Within Sovereign Nations to Advance Indigenous Nations
Poster Presentation presented at Annual International Conference for Education for Equity (AICE)
Honolulu, Hawaii

A Perpetuation of Vidal Racism During The COVID-19 Pandemic
International Organization of Social Sciences and Behavioral Research (IOSSBR)
New Orleans, Louisiana

A Case Study: Ethnic, Gender, And Racial Diversity in A Corporation: The Impact Of Mentoring Diversity
Frontline Managers
Doctor of Education Dissertation, Pepperdine University, ProQuest Publishing
ABSTRACT

Throughout history, socio-cultural and political movements have condemned indigenous peoples by advancing false rhetoric, half-truths, and equivocations championed as axiomatic principles. Foreign entities have massacred philosophies, traditions, and tribes while stealing ancestral lands that have yet to be recovered. This exploratory study examines the phenomenon of developing knowledge infrastructure within sovereign nations. A descriptive qualitative approach was used to answer the research question: To what extent, if at all, might knowledge infrastructure support generational advancement through learning and development programs within sovereign nations? Semi-structured interviews were conducted with 15 Tribal citizens, community members, and employees who currently or have worked in business enterprises within sovereign nations in the United States. This study details the significance of knowledge infrastructure and proposes recommendations based on collective voices within sovereign nations.

Keywords: Cultural sovereignty, generations, Indigenous Americans, knowledge infrastructure, Learning and Development, pedagogy, political sovereignty, poverty, prejudice, segregation, systemic racism
Chapter 1: Introduction

Chapter Overview

This chapter describes the study’s context, problem statement, purpose statement, significance of the study, definition of terms, theoretical framework, research question, limitations, delimitations, assumptions, positionality, organization of the study, and chapter summary.

Background of the Study

Foreign entities have positioned indigenous communities to fulfill the expectations of white supremacy. These communities were stripped of their identity, experienced land alienation, were forced laborers, given low and often no pay, and were overworked under horrendous conditions. Cities, plantations, and religious compounds were built with the blood, sweat, and tears of many minority groups, including Indigenous Americans. Nonetheless, European colonies, the Catholic Church, and the modern Western Hemisphere have all negatively impacted Indigenous Americans' lives today.

For Indigenous Americans, these exchanges resulted in a frequent fatal loss of community, land, knowledge, life, and traditions and a disturbance to their traditional customs. These exchanges are still felt because of the substantial impact that breaches the cultural, environmental, economic, political, and legal obstacles that affect sovereign nations today. To fully understand America’s history and culture, Indigenous American history must be highlighted to illustrate the egregious oversight. Despite colonialism, Indigenous American communities have struggled and succumbed to economic, environmental, and social issues that have limited most tribal nations in maturing due to a lack of knowledge infrastructure. As a
result, Indigenous Americans have fought to keep their cultural and political sovereignty, knowledge, and traditions.

Indigenous Americans have always contributed to the transformation, growth, and vibrancy of all nations, both domestic and foreign, by extending their engagement beyond the immediate confines of their established reservations. Indigenous Americans have traded arts, ideas, products, and technology with other tribal groups near and far for a millennium. Indigenous Americans' acquisition and production of food, knowledge sharing, labor patterns, and Old-World technology contributed to the modern world's development.

Indigenous Americans and other indigenous peoples worldwide may offer their expertise and views to solutions as global interconnectedness deepens and change accelerates. Over millennium, the Western Hemisphere has been riddled with complex, diverse, and well-developed communities interacting with one another. Indigenous peoples in the United States continue to fight for their societies' identity, integrity, and survival.

Due to the governmental implementation of laws and reservation systems, these historical circumstances evolved into imposed generational cycles of genocide, poverty, prejudice, and racism. Indigenous Americans adapted to these European influences, and despite the constant restraint and struggle, they have tried to gain their land back since the colonial period. The imposition of international law, state law, and other borders on Indigenous territories, such as a reservation allocation, altered people's interactions with their environs, influenced how they lived, and occasionally isolated tribal communities and their family members.

European colonists utilized a combination of economic, homicide, legal, military, political, and social measures to remove and relocate Indigenous Americans, ultimately attempting to undermine their sovereignty. By treating Indigenous ways of life as public
scientific property, these colonists constituted a major danger to their cultural sovereignty. The significant global debate has resulted in how the development and maintenance of United States policies should impact Indigenous Americans. Many of these policy measures still negatively impact traditional Indigenous American rights, traditions, and values.

Indigenous Americans in the Americas have been successful administrators and stewards of the land long before they met European colonists (National Museum of the American Indian New York., n.d.). In addition to social displacement and territorial wars because of European contact, the underlying underpinnings of Indigenous American communities, countries, cultures, and tribes were destroyed. Indigenous people have learned, governed, honored, and prospered in their homelands for thousands of years. Culture, food, information, other things, and spirituality could all be exchanged via trading routes.

These cultural and social foundations still influence Indigenous Americans' ties to the land and interactions with it. By identifying the root causes of their social challenges, tribal elders in each generation have passed on their beliefs, culture, ideologies, knowledge, traditions, and values to the next generation through tribal arts, ceremonies, customs, languages, music, and social practices. Indigenous Americans in the Western Hemisphere have gained substantial traction as executors of their sovereign nations, ancient knowledge, philosophies, rituals, traditions, and values (Little, 2017; National Museum of the American Indian New York., n.d.).

Individual development and identity among Indigenous Americans are linked to the importance of their cultural sovereignty and knowledge (Hunter, 2022; National Museum of the American Indian New York., n.d.). Individual roles are cultivated and developed in tribal society through various methods, social structures, and rites of passage. Well-established customs and practices have aided the creation of Indigenous American identity throughout history but has not
captured the correct perception needed to drive their communities forward (National Museum of the American Indian New York., n.d.). Elders and family members carefully observe and nurture distinctive abilities and interests, gender and social roles, and family specialties such as hunters, gatherers, painters, healers, and religious leaders. Indigenous Americans' principles, techniques, traditions, and values have always been a part of world society and are still relevant in 2023. Individual Indigenous Americans' obligations and rights have been determined by their cultural ideas, morality, and values and are marked by innovative adaptation, perseverance, and rejuvenation.

Indigenous Americans were especially vulnerable during the colonial period because they had never been exposed to European diseases like smallpox and lacked immunity to the disease, which wiped out Indigenous Americans and killed up to 90% of their population (PBS, n.d.). With the population sick and declining, resistance to European colonization of the Americas was impossible to mount (PBS, n.d.). During this period, Indigenous Americans also fought against ongoing socio-political problems, including eugenics in new laws, the surge in European populations, and the slave trade; They were seen as savages and non-civilized.

Three court decisions made by John Marshall, an American politician, and jurist who served as the fourth Chief Justice of the United States, directly impacted Indigenous Americans and other minorities' survival and fate in the early 1800s and beyond. The Marshall Trilogy is a set of three Supreme Court decisions from the early 1800s that recognize the legal and political status of Indian nations (PBS, n.d.). The first ruling, Johnson v. M'Intosh, was made in 1823 and stated that private persons could not purchase land from Indigenous Americans (PBS, n.d.). The second ruling, Cherokee Nation v. Georgia, was made in 1831 and held that the Cherokee nation was dependent on the United States, having a relationship like that of a “ward to its guardian”
The third decision, Worcester v. Georgia, was made in 1832 and established the connection between tribes and state and federal governments, holding that the federal government had sole control over Indigenous nations (PBS, n.d.).

The ability of Indigenous Americans to self-govern has been harmed by several historical policy periods, (a) European colonization since 1492; (b) federal and state treaty periods from 1789 to 1871; 3.) removal periods from lands in 1834 to 1871; (c) allotment and assimilation periods from 1887 to 1934; (d) tribal reorganization from 1934 to 1958; (e) termination from 1953 to 1988; and (f) self-determination from 1975 to the present (Hunter, 2022; Little, 2017; National Museum of the American Indian New York., n.d.).

By identifying and understanding the impact of knowledge infrastructure gaps, sovereign nations may be encouraged to break social cycles in America by advancing their tribes. Learning and Development training programs should be developed within sovereign nations to establish structured ways of (a) enabling growth measures in personal and professional development; (b) leveraging mentorships to enhance weaknesses; (c) investing time in preparing oneself mentally for challenges experienced in sovereign nations, and (d) understanding how to serve others through leadership techniques.

Their long-term occupation of tribal homelands and continued observation and engagement with such locations resulted in Indigenous knowledge systems that are inextricably connected to the Western Hemisphere. Indigenous Americans recognized that humans are a part of the environment and appreciated the relationship between local surroundings and cultural traditions. As a result, knowledge is held in high regard and revered.

Indigenous peoples used several approaches to record and preserve their histories and knowledge. Hearing and understanding Indigenous American history from the perspective of
sovereign nations is crucial when discussing cultural sovereignty, economics, and history in the Americas. These Indigenous American perspectives contribute to the educational, economic, social, and political conversation. Providing a historical and contemporary context for Indigenous Americans allows for a better grasp of world history and the value of knowledge infrastructure within sovereign nations.

Indigenous American beliefs, customs, and ideas have always been a part of global culture. Individual Indigenous Americans' rights and responsibilities are shaped by their cultural beliefs, morality, and values. California's enslavement, mistreatment, neglect, treatment, and violence of its early residents were unquestionably awful due to servitude, maltreatment, neglect, and violence (Tribal College Journal of American Indian Higher Education, 2019). Manifest Destiny's racist zeal swept through the future state after the territory was reclaimed from Mexico in 1848 amid the highly romanticized gold rush (Tribal College Journal of American Indian Higher Education, 2019).

In 1851, federal commissioners signed eighteen treaties with various tribes and village groups, granting the state's Indigenous people 8.5 million acres of reserve land in exchange for the rest of their belongings (Tribal College Journal American Indian Higher Education, 2019). In 1852, California leaders conspired to have the treaties rejected by Congress (American Indian Higher Education: A Journal of Tribal Colleges, 2019). Indigenous peoples are compelled to combat hostile opportunists because the government never approved the treaties (Tribal College Journal of American Indian Higher Education, 2019).

The Indian Island Massacre on February 25, 1860 was unimaginably horrible, according to several accounts (Tribal College Journal of American Indian Higher Education, 2019). Major G.J. Raines of the United States Army later wrote a report claiming a group of 15 to 20 settlers
massacred almost 150 peaceful Wiyot men, women, and children at three different meeting spots (Tribal College Journal of American Indian Higher Education, 2019). History must be accurately recorded to facilitate true community reconciliation. However, for true reconciliation to occur, Americans must address the current crisis plaguing the country's original citizens (Tribal College Journal of American Indian Higher Education, 2019). Governor Newsom deserves credit for his first efforts, but apologies alone will not heal centuries of historical trauma (Tribal College Journal of American Indian Higher Education, 2019). Californians should attempt to make amends for the past, but healing the sorrows of Indigenous descendants is the finest approach to commemorate their ancestors (Tribal College Journal of American Indian Higher Education, 2019). The criminals boasted about their crimes, yet they were never brought to justice for their heinous acts (Tribal College Journal of American Indian Higher Education, 2019).

In the late twentieth and early twenty-first centuries, several Indigenous American communities came together and attempted to restore and regain their cultural and political sovereignty, knowledge, languages, political sovereignty, and traditions (Little, 2017; National Museum of the American Indian New York, n.d., Slawny, n.d.; Spilde & Taylor, 2013). Many Indigenous American institutions today are hybrids of federal governmental structures, have reflections of foreign influences, and have Indigenous adaptation to meet the demands of their tribes (National Museum of the American Indian New York, n.d., Slawny, n.d.; Spilde & Taylor, 2013). Indigenous Americans are actively involved in a variety of commercial enterprises such as tribal gaming, creating constitutions and economic policies for their nations, and controlling and managing natural resources that have an impact on the production, distribution, and consumption of products and services throughout their reservations (National Museum of the American Indian New York., n.d.).

To maintain tribal sovereignty and promote tribal culture, knowledge, and well-being for its members, tribal governments, write and enforce laws and regulate judicial systems, social well-being, natural resources, economic, educational, and other activities (National Museum of the American Indian New York., n.d.). As a result, Indigenous Americans developed a wide range of political systems, many of which incorporated important concepts for the successful rule of law (National Museum of the American Indian New York., n.d., Slawny, n.d.; Spilde & Taylor, 2013). Through shared information, sovereign nations and their leaders acknowledged each other's sovereignty, conducted diplomacy, and formed strategic alliances to advance their tribes (National Museum of the American Indian New York., n.d.).

Language, cultural events, and education are ways Indigenous American knowledge is passed down through the generations (National Museum of the American Indian New York., n.d.). When traditional knowledge is applied to modern global challenges, it produces dynamic and innovative solutions (National Museum of the American Indian New York., n.d.). The continual search for creative answers to current difficulties sovereign states face can benefit surrounding communities. Indigenous wisdom reveals a millennia-long interaction with the
living planet based on careful observation, exploration, and practice. Languages, cultural values, and practices intertwine Indigenous American knowledge. This knowledge is based on recognizing the connections between people and their surroundings and how the connection can establish foundations for generational growth.

In the different locations of the Western Hemisphere, Indigenous American knowledge enabled them to live productive, innovative, and sustainable lifestyles (National Museum of the American Indian New York., n.d.). Agriculture, ecology, innovations, land preservation, technologies, and trading routes have benefited greatly from Indigenous American expertise. The acquisition of products and technologies from Europeans and others resulted in significant cultural, economic, and social changes in Indigenous American cultures.

Unfortunately, much of the indigenous wisdom of the Americas was lost in the years after European contact (National Museum of the American Indian New York., n.d.). Nonetheless, the intergenerational transmission of information, the rehabilitation of cultural practices and traditions, and the invention of modern knowledge must continue throughout Indigenous American communities, nations, and tribes for generations to thrive.

**Problem Statement**

Currently, the problem identified for the proposed study is limited growth within some sovereign nations in the United States due to the lack of proper knowledge infrastructure. As mentioned in the previous section, Indigenous Americans have experienced systemic prejudice and racism that has been far cemented into how they interact within their native lands. Indigenous Americans lack advancement, in personal and professional development (National Museum of the American Indian New York., n.d.; Slawny, n.d.; Spilde & Taylor, 2013).
Nevertheless, there has been limited research to determine the impact of building knowledge infrastructure within sovereign nations.

What is unknown is if developing knowledge infrastructure within sovereign nations has the potential impact needed to further the current momentum being designed for Indigenous Americans across the globe. Using modern technology has exposed the harsh reality of intersectionality, institutional racism, and overt, systemic, and structural racism against Indigenous Americans. There are growing divides that continue to segregate Indigenous Americans cognitively, physically, and spiritually, which has continued to cause anguish, death, depression, hurt, poverty, etc.

Therefore, this research study is an opportunity to examine the significance of implementing knowledge infrastructure within sovereign nations. The parameters of this study focused on how to establish learning and development programs within sovereign nations. The researcher provided a critical, historical, and knowledge evaluation detailed in Chapter 2.

There are minimal learning and development frameworks and methodologies for advancing Indigenous Americans in American society in the literature. More well-informed learning strategies must be used to disrupt societal cycles by establishing suitable knowledge infrastructures. Despite various evaluations and comparisons, the core cause has yet to be examined holistically to uncover solutions to advance sovereign nations. The historical and current diversity of Indigenous Peoples' cultures, knowledge, languages, and customs across the Western Hemisphere must be recognized as knowledge needs to be more can promote cultural understanding and sensitivity and prevent stereotypes in other global communities.
Purpose Statement

This descriptive qualitative study explores the underlying personal and professional advancement challenges experienced by Indigenous Americans within sovereign nations by examining lived experiences. At this stage in the research, building a knowledge infrastructure within sovereign nations through enterprise learning and development programs will take time. If tribal sovereignty is relinquished, tribal communities could use knowledge infrastructure to sustain themselves.

A big step toward tackling the challenge of advancing sovereign nations can be achieved by better understanding the lived realities of Tribal citizens, community members, and past and current employees within their enterprises. This study aimed to answer the following research question: To what extent, if at all, might knowledge infrastructure support generational advancement through learning and development programs within sovereign nations? The research question addressed the focus of the research problem by examining a phenomenon, and the direct impact building knowledge infrastructure through learning and development programs could have on sovereign nations. The research question calls attention to the lack of literature evaluating developing knowledge infrastructure to advance Indigenous Americans generationally.

The research is a watershed moment in the progress of sovereign nations worldwide. This study looked at the possibility of using knowledge infrastructure to bring about the necessary transformation for Indigenous Americans' advancement. The goal is to develop a grounded theory by applying inductive reasoning that positively impact Indigenous Americans across generations. The researcher undertook a qualitative study by interviewing diverse groups of individuals who support sovereign nations. The researcher has developed an interview protocol
to uncover responses that answer the research question by yielding valuable data. The researcher documented contemporary and traditional experiences to serve other researchers in modeling their scholarly analysis for advancing Indigenous Americans.

**Significance of the Study**

The significance of the study is expected to contribute to the existing broad literature. The researcher intends to provide existing examples of how Indigenous Americans’ have utilized knowledge to advance their nations and enterprises. Greater society will benefit from this study because it will illuminate the historical and ongoing challenges experienced by Indigenous Americans. By resourcing sovereign nations as knowledge stewards, they can become intellectual partners that will continue to expand and inform understandings of the Indigenous Americans past and present.

The study aimed to understand if learning and development training programs, as didactic models, will help build the necessary knowledge infrastructure to advance sovereign nations through global interactions. As literature regarding this topic is absent, this study will help other scholars learn about the importance of advancing Indigenous Americans through building knowledge infrastructures within their sovereign nations.

**Definition of Terms**

This section provides definitions are crucial terminology utilized in this study:

- 21st-century skills are defined as adaptability, civic literacy and citizenship, collaboration and teamwork, critical thinking, creativity and flexibility, ethics, imagination, interpersonal communication skills, information literacy, initiative, leadership, social responsibility, and technology literacy are all important qualities to possess.
• Aversive racism, as a theory, is described as the protracted avoidance of interaction with various racial and ethnic groups, which shows negative attitudes toward racial and ethnic minorities by Dovidio and Gaertner (1986).

• Bias is defined by the author as an inherent prejudice in favor of or against one person or group when unjustly contrasted by another.

• Communities are ethnic groups, families, and local support groups within a sovereign nation.

• Covert racism is defined as racial discrimination disguised and subtle rather than public or evident. Individuals are discriminated against in covert racism using means that are typically evasive or appear to be passive (Coates, 2007).

• Cultural sovereignty is defined as the process of reclaiming culture and building a nation to protect the inherent identity of indigenous communities.

• Employees are individuals who are or were hired by a sovereign nation to do a specific job within the enterprise.

• An enterprise is a collection of businesses comprising more than 3,000 employees.

• Epistemology is a philosophical field that investigates the nature and justification of knowledge.

• Indigenous americans include American Indians, First Peoples in America, and Native Americans. Indigenous Americans include peoples of the United States, sometimes including Hawaii and territories of the United States, and other times limited to the mainland. There are 574 federally recognized tribes living within the US, about half of which are associated with Indigenous American reservations.
• Institutional racism, also known as systemic racism, is a type of racism that is embedded in society or an enterprise through rules and regulations; It can lead to discrimination in criminal justice, employment, housing, health care, political power, and education, among other issues (Harmon et al., 2020).

• Knowledge acquisition is the gathering or collecting knowledge from many sources to add new knowledge to a knowledge base while also refining or updating existing knowledge.

• Knowledge infrastructure is a vast network of artifacts and institutions dedicated to developing, disseminating, and preserving specific knowledge about the human and natural worlds (Edwards, 2010).

• Learning and development is the enhancement of an employee's abilities, knowledge, and competency in the workplace, resulting in increased productivity.

• Learning cycle is defined as a notion that describes how people learn from their experiences. There are multiple steps or phases to a learning cycle, the last of which can be followed by the first.

• Learning journey is a long-term strategy for building groups of leaders. It is founded on the idea that meaningful behavior change takes time and that people learn best when they may customize their learning experience.

• Learning objectives are succinct statements that describe what learners are expected to understand by a course, lesson, project, or workshop.

• Learning enterprise is defined as one that encourages the learning of its members and modifies itself regularly.
- Learning pathway is a learner's selected path via various (usually) e-learning activities that gradually allow them to develop knowledge. The control of decision shifts from the instructor to the learner through learning paths.

- Political sovereignty refers to a state's right to absolute and unrestricted power, legal or political, within its borders.

- Poverty is a person's inability to meet fundamental necessities due to a lack of money or material things (Merriam-Webster, n.d.-d).

- Prejudice is an emotional reaction to a person based on their perceived membership in a particular group.

- Mental model explains someone's thought process about how something works in the real world. It represents the surrounding world, the relationships between its various parts, and a person's intuitive perception of the consequences. Mental models can help shape behavior and approach solving problems like a unique algorithm and doing tasks.

- Metacognition is recognizing and comprehending one's mental processes and the underlying patterns.

- Racial segregation is the systematic isolation of people into racial or ethnic groupings.

- Single loop learning is defined as making modifications to rectify a mistake or an issue without question.

- Sovereignty is defined as the authority of a state to govern itself.

- Sovereign nation is defined as a political entity in the United States that is represented by a single centralized government that has sovereignty over a geographic area.

- Tribal citizens belong to three sovereigns: their tribe, the United States, and the state where they live.
- Tribal Community Member is a member of a sovereign nation married to a Tribal Citizen.

- White supremacy is the view that Caucasian people are superior to other races and should rule over them with a focus on defending and preserving white privilege and power.

**Research Question**

The primary research question that guided this study is, to what extent, if at all, might knowledge infrastructure support generational advancement through learning and development programs within a sovereign nation?

**Limitations**

The researcher created ten limitations that would restrict the generality of results within the proposed study. These limitations are as follows, (a) the sample size of 15 interviews, and are only of sovereign nations in the United States; (b) the location of the study was be virtual due to COVID-19 mandates and restrictions; (c) the time of study was held during the Spring of 2022 through the Fall of 2022; (d) there may be a lack of available and reliable data during the time of the study was over five months; (e) there is a lack of prior research studies on the topic of experimental research design; (f) there is self-reported data such as (a) attribution, (b) exaggeration, (g) selective memory, (h) telescoping; (i) due to the nature, privacy, and restrictions found within sovereign nations, there is limited access, and no longitudinal effects were considered; and (j) the fluency in the English language was be required as the researcher has elected this communication.

**Delimitations**

There are six limitations created by the researcher that would restrict the generality results of the study. These delimitations are as follows, (a) only current and past employees,
tribal citizens, and community members working within sovereign nations were interviewed; (b) the researcher chose the problem, purpose statement, research paradigm, and research question because he is of Indigenous descent and wants to call attention to the subject; (c) the researcher's choice of population sample was included in the study; (d) the location of the interviews; (e) the scheduling of the interviews; and (f) the researcher's role as an agent in the research process due to the nature of the phenomenological inquiry; This was addressed through reflection and field notes.

Assumptions

There are seven assumptions created by the researcher that would restrict the generality results of the study. These assumptions are as follows, (a) interview subjects were able to recall and respond to questions regarding their lived experiences knowledgeably and truthfully; (b) the researcher did not sway or prejudice the participants' responses; (c) the study participants had a decent amount of commonality and experience with their experiences; (d) the participants' life experiences contributed to the scholarly body of information surrounding building knowledge infrastructure within sovereign nations; (e) the researcher may be unable to identify a body of literature that describes infrastructure implemented by a sovereign nation; (f) Indigenous peoples want to improve their personal and professional lives; and (g) learning and development programs provide the knowledge infrastructure needed to help Indigenous Americans and their businesses reach their full potential.

Positionality

The researcher’s positionality is that he has experienced the benefits of implementing learning and development training programs within enterprises in a sovereign nation, higher education, and enterprise capacities. The researcher is an Indigenous American with family
origins that link to the Jicarilla Apache Nation and the Pueblo of Cochiti in New Mexico. The nature of knowledge is significant in his life, encouraging his active pursuit of various academic journeys.

He has a passion for researching how to improve knowledge acquisition for minority groups, specifically Indigenous Americans. He has completed CITI Training (see Appendix A) to ensure that the study is not comprised. He is an academic-corporate practitioner dedicated to establishing a learning-centered environment based on methodologies and core solution-based tactics. He is dedicated to assisting individuals in identifying and developing their passions while also assisting them in becoming successful professionals.

Over the past 20 years, he has worked in the following industries: consumer products, consulting, entertainment, financial, gaming, government, higher education, hospitality, legal, radio, retail, technology, and telecommunications. Within these industries, he has worked in the following departments: advertising, creative, customer success, diversity and inclusion, education, human resources, learning and development, marketing, promotions, sales, and technology. He currently serves as a learning and development department manager that supports a sovereign nation and its million-dollar enterprises. In his current practitioner role, he has helped the sovereign nation transform their enterprises into learning enterprises and has supported training more than 10,000 employees. In addition to his capacity as a Learning and Development Department Manager, he is a Professor of Business Management, Communications, Glocalization, Marketing, Organizational Leadership, Sustainability, and Strategy at Arizona University Global Campus – Forbes School of Business and Technology, Austin Peay State University, California Baptist University, Holy Names University, Pacific Oaks College, University of Redlands, and the University of the People. He teaches in both
asynchronous and synchronous capacities. He has continually received high ratings amongst his students for outstanding teaching and has extensive global corporate consulting and training experience.

He has achieved a #1 ranking in several universities for outstanding 21st-century skills implementation and pedagogy in his academic roles. He has been recognized as one of the top teaching adjunct faculty at California Baptist University in their Online and Professional Studies program and received numerous awards, including the University of Redlands Mentor Award for his mentoring excellence in serving international minority MBA students. In addition to these capacities, he has also served in several senior leadership roles at Fortune 100 enterprises and has participated in several international academic competitions throughout the globe. Additionally, he has previously coached and directed several debate programs as an Academic Judge for inner-city High Schools.

The researcher has also completed a Tribal Administration Certificate Program at Claremont Graduate University in the Spring of 2022 to support this study. He is a Ph.D. Candidate at Pepperdine University, where he is studying Global Leadership and Change. He graduated from Pepperdine University with a Doctor of Education in Organizational Leadership and from Purdue University with a Master of Science in Strategic Communications as well.

He has worked internationally to coach and develop government officials and leadership at public and private enterprises. He has established several learning, development, and diversity programs to guide executives in enhancing their enterprises’ success. He has also been a critical advisor, driving other long-term relationships between enterprises, colleges, and universities. He has advised on several consulting engagements in third-world countries and has taught and led learning programs to advance minorities and military leaders throughout the globe. He has
established a non-profit, Neighborhood Dreams, Inc., with his wife, Dr. Dana Vigil, to help serve underserved communities and marginalized individuals.

**Organization of the Study**

This study addressed the problem statement and answer the research question provided. This study’s purpose was examined through an extensive literature review to identify the gaps and inconsistencies in existing theories, frameworks, and practices in advancing Indigenous Americans through building knowledge infrastructure. The following sections are outlined in the subsequent paragraphs.

Chapter 1 introduced the study, and provide the background of the study, problem statement, purpose statement, significance of the study, key definitions, relevant theoretical frameworks, research question, limitations, delimitations, and assumptions. It provided a socio-cultural contextual analysis and scholarly significance of the study.

Chapter 2 introduces the literature review to establish the conceptual framework and research paradigm to guide the study. Within this chapter, literature was reviewed to determine relevancy within existing frameworks and paradigms of the observed phenomenon. A critical, historical, and scholarly literature review provided additional analysis of the field’s current state. The study illuminates gaps in the literature and connecting the significance of conducting this study to the research question.

Chapter 3 identified the research methodology for pursuing this phenomenological inquiry. This encompassed a holistic examination of the research purpose, research question, presentation of the research design, design validity, research setting, sample population, human subject considerations, instrumentation, data collection procedures, a data management protocol, and the data analysis process study.
Chapter 4 identifies the research findings of the study. Within this chapter, there is an explanation of study participants, demographic profiles, interview items, presentation of findings, structural themes, and a chapter summary. This descriptive qualitative study aimed to explore knowledge by examining the lived experiences of Indigenous Americans.

Chapter 5 discusses the discussion of findings, conclusions, implications for policy and practice, recommendations for future research, researcher’s reflection, and a chapter summary. Understanding the benefits, elements, outcomes, and value of learning and development training programs may yield significant insights into the scalability of global learning and development training programs within sovereign nations.

Chapter Summary

This chapter provided an overview of the historical context that has developed the study’s research inquiry. The researcher aimed to reveal the importance of building knowledge infrastructure with a sovereign nation by addressing the current gaps identified within lived experiences. One way of addressing these gaps is through the implementation of knowledge infrastructure. These gaps also encapsulate the study’s problem statement.

By not advancing sovereign nations, there was significant cultural impact, development, and growth for future generations of Indigenous Americans. The most important concepts, topics, and viewpoints that influenced the selection of this study topic are examined in the next chapter.
Chapter 2: Literature Review

Chapter Overview

In this chapter, the researcher reviewed relevant literature related to building knowledge infrastructure within sovereign nations by conducting a scholarly analysis to explore answering the following research question within the study: To what extent, if at all, might knowledge infrastructure support generational advancement through learning and development programs within a sovereign nation? Figure 1 illustrates the identified themes linked to Indigenous Americans’ learning experiences and guided by an understanding of cultural properties, common and esoteric knowledge, prejudice, racism, ritual landscapes, and sacred sites.

Figure 1

Literature Map

Many of these themes come from ordinary undertakings and phenomenological experiences identified in the researcher’s analysis. Gatekeepers (i.e., medicine people, ritual practitioners, and tribal leaders) with vested interests, substantial expertise, and long-standing relationships to
key places maintain more technical information (Vansina, 1985). The study’s review of the literature is presented in the following sections.

**Context**

The literature on knowledge infrastructure within Indigenous nations is still lacking, as much literature is focused on tribal gaming and political sovereignty. However, the researcher found themes linking the significance of knowledge within Indigenous nations and enterprises. Many Indigenous communities have put in place practical mechanisms and sophisticated concepts to safeguard their ancestral landscapes and ways of existence but have struggled to build the required knowledge infrastructure for future generations.

**Conceptual Framework**

Several psychological approaches to knowledge, including introspection, perception, memory, testimony, intuition, and logical and scientific reasoning techniques, are vital to address while exploring the nature of knowledge. Subjective history makes up most of the literature. According to Haynes (2010), the reality of tribal nationhood and Indigenous Americans' dual citizenship inside their tribal countries considerably broadens the definition and parameters of tribal knowledge.

This type of knowledge involves considering and comprehending Indigenous Americans' historical and political settings to reveal the complexities of the United States' politically based history and current connection with and responsibility for tribal nations and their populations (Haynes, 2010). The epistemological position, therefore, has direct practical outcomes for sovereign nations across multiple generations. The ontological commitment of this review of literature is to express what is currently there within the sovereign nation and how things there relate to each other in the metaphysical properties.
The researcher contends that lack of building of knowledge infrastructure from a historical and contemporary context is not addressed, there will be continued colonialism and cultural imperialism for tribes national wide. Most literature on American society focuses on advancing white supremacy, not Indigenous American development. Identifying such segregation does not invite the needed change to advance Indigenous Americans. Most organizational literature focuses on advancing governmental policies but does not focus on the growth needed for Indigenous Americans to thrive. Knowledge only exists within limited generations and is lost due to assimilation into American society.

**Theoretical Framework**

This study’s problem and the stated purpose of this research were created due to the cultural and social deterrents experienced by Indigenous Americans that have prevented the necessary growth for some sovereign nations. As a result, each component of this study was informed by a constructivist and interpretive perspective. The framework fits within a postmodernist research paradigm and phenomenological inquiry as a qualitative research approach (Husserl, 1931). The researcher’s worldview centers on constructivism and transformationalism due to lived experiences as an Indigenous American. The researcher seeks to understand how to advance Indigenous Americans within a socially constructed world by examining a cultural paradigm due to systemic racism.

**Systemic Racism**

The early development of the United States of America was built by various minority ethnicities (Adams et al., 1997). However, Indigenous Americans have had the land they existed on, lived and managed stolen from European settlers. During the colonial period, deep ethnic, racial, and social inequities existed due to the creation of systemic racism further cemented
within new laws established by foreign governments. Systemic racism segregates communities of color disproportionately, limits opportunity, and upward mobility (Adams et al., 1997; Freire, 1993; Prilleltensky, 1994). This type of racism is deeply rooted in America’s foundation. Due to this establishment, current Indigenous generations find it challenging to secure treatment within the criminal justice system and quality education, healthcare, housing, and jobs (Prilleltensky, 1994). Consequently, these barriers to equality have profoundly impacted those racially oppressed by systemic racism (Adams et al., 1997; Freire, 1993; Prilleltensky, 1994). Historical systemic racism has continued to affect Indigenous American communities primarily due to the racialization of federal laws (National Geographic, 2020; Prilleltensky, 1994).

The Indian Reorganization Act

The Indian Reorganization Act (IRA), also known as the Wheeler–Howard Act of June 18, 1934, and later dubbed the “Indian New Deal,” was a US congressional act aimed at enhancing Indian self-government and accountability while minimizing federal involvement over Indigenous American concerns (Encyclopedia Britannica, n.d.). The IRA provides federal funds to tribes that adopt American-style constitutions and replace their administrations with city councils. The new governments lacked the checks and balances of power that inspired the United States Founding Fathers (National Institutes of Health, n.d.). The plight of Indigenous Americans received greater attention in the 1920s as anthropologists and writers began to criticize the existing federal policy and move away from racist ideas about Indigenous inferiority and instead recognize the beauty and value of Indigenous culture (National Geographic, 2020).

The principal purpose was to strengthen, promote, and sustain the tribes and their ancient Indigenous American traditions in the United States, rather than the conventional goal of cultural absorption of Indigenous Americans into American culture. At the time of the IRA, it was US
policy to dismantle Indian reservations, divide common property, and transfer 160-acre pieces to individual heads of households to be jointly held.

Indigenous Americans dominated the land (U.S. Census Bureau, 2006). Because non-Indians were not allowed to acquire land on reservations, the land's cash worth was limited due to a smaller market (U.S. Census Bureau, n.d.). Hawaii was exempted from the regulation, while Alaska and Oklahoma were brought to the union separately in 1936. (U.S. Census Bureau, n.d., 2006). In 1930, the census tallied 332,000 Indigenous Americans; in 1940, it counted 334,000, including those living on and off reservations (U.S. Census Bureau, n.d., 2006). In the late 1920s, the United States spent an average of $38 million a year on Indigenous Americans, with a low of $23 million in 1933 and a high of $38 million in 1940 (US Census Bureau, n.d., 2006).

**Boarding Schools**

“Kill the Indian in him, and save the man” (Little, 2017, para. 1). The US government utilized this mindset to send tens of thousands of Indigenous American children to “assimilation” boarding schools in the late 1800s (Little, 2017). Little (2017) states that:

The history of this forced assimilation is far from settled. On August 7, 2017, the U.S. Army began exhuming the graves of three children from the Northern Arapaho tribe who had died at Pratt’s Carlisle Indian Industrial School in the 1880s. (para. 3)

Additionally, Little (2017) states that:

Carlisle and other boarding schools were part of a long history of U.S. attempts to either kill, remove, or assimilate [Indigenous] Americans. In 1830, the U.S. forced [Indigenous] Americans to move west of the Mississippi to make room for U.S. expansion with the Indian Removal Act. However, a few decades later, the U.S. worried it was running out of places to relocate the country’s original inhabitants. (para. 5)
As part of the federal drive for assimilation, boarding schools banned Indigenous American children from using their languages and names, practicing their religion and culture, and spreading their knowledge (Little, 2017). After European contact, scholars estimate that 350 Indigenous languages were spoken in what would become the United States of America (Hunter, 2022; Little, 2017). Only 115 of those languages are still spoken today (Hunter, 2022). Without rapid action, another 79 languages are expected to vanish in the next two decades, and Indigenous American knowledge will soon be lost (Hunter, 2022).

During this time period, Indigenous peoples were given new Anglo-American names, clothing, and hairstyles and were informed that their way of life was inferior to white people's (Little, 2018). Over the next several decades, Carlisle Indian Industrial School, served as a model for nearly 150 comparable schools across the country (Little, 2018). Indigenous American boarding schools forced assimilation, akin to the 1887 Dawes Act, which redistributed Indigenous American land, or the Bureau of Indian Affairs 1902 “haircut order,” which prohibited males with long hair from receiving rations (Little, 2018). These measures aimed to make Indigenous peoples more like the white Anglo-Americans who had previously colonized their land (Little, 2018). These measures also prevented children from speaking their native language or participating in cultural and religious ceremonies (Little, 2018).

Furthermore, by removing pupils from their homes, boarding schools disrupted their bonds with their families and other tribal members (Little, 2018). When children were taught that speaking their native language or practicing their religion was harmful, they struggled to connect with their families when they returned home, and some students did not come home (Little, 2018). Students within these boarding schools were susceptible to deadly diseases like
tuberculosis and the flu. Between its founding in 1879 and its dissolution in 1918, Carlisle Indian Industrial School, buried nearly 200 students in its cemetery (Little, 2018).

Kiel, a member of the Oneida Nation, argues that the boarding school experience is to blame for the extinction of many Indigenous languages (Little, 2018). He used the example of his great-grandparents' generation, who attended boarding schools (Little, 2018). Kiel states that his:

grandmother recalled hearing the Oneida language being spoken around her by the people who were the adults, but they chose not to teach it to children…Why? Because it was a source of trauma for them. And they had been told that it was backward, that it was uncivilized, that it was of the past, that there was no utility in speaking it. (Little, 2018, para. 7)

According to The National Indian Child Welfare Association (2020), “Congress passed the 1978 Indian Child Welfare Act based on research that 25–35 percent of all [Indigenous] children were being removed; of these, 85 percent were placed outside of their families and communities even when fit and willing relatives were available” (para. 1). According to Haynes (2010) the federal school system has existed for over 150 years, with a history of forcibly assimilating children, poor academic achievement, and failing facilities.

Haynes (2010) states that Pewewardy (2005) says that “[Indigenous] and non-[Indigenous] people have been educated within an education system designed and implemented from the colonizing and culturally imperialistic perspective, one that promoted and continues to promote the assimilation and oppression of those outside the mainstream” (as cited in Haynes, 2010, p. 78). As noted in Haynes (2010):
The history of assimilation of [Indigenous] Americans into the body politic (Adams, 1995; Pratt, 1964), combined with the selective traditions of textbooks and curriculum (Garcia, 2008; Loewen, 1995) and manufacturing of “Indianness” in the popular culture consumed by generations of Americans (Huhndorf, 2001) has resulted in a historical amnesia from which most U.S. citizenry has yet to awaken. [Indigenous] Americans are often posed as a minority group when, in fact, they are not because of the historical and political relationship of the U.S. government with individual tribal nations, most vividly evidenced through treaties and other contractual agreements. Per the framework of sovereignty, tribal nation governments have equal status to that of the United States federal government. However, this is seldom addressed or mentioned within citizenship education or social studies classes, thus initiating, maintaining, and continuing historical amnesia students’ and U.S. citizens. (p. 78)

A more profound and comprehensive knowledge infrastructure must be built in sovereign nations to advance their educational, personal, and professional development. This study provided perspectives about Indigenous Americans, bringing the richness of the literature collections and scholarship to hear the diverse voices of Indigenous Americans (Smithsonian, n.d.). According to Smithsonian (n.d.), “currently, there is little evidence in...textbooks, curricula, or academic standards—of important historical and contemporary events that include American Indian knowledge and perspectives, and little or no integration of these events into the larger narratives of American and world history” (p. 1). Since the 1987 Indian Child Welfare act was passed, some tribes could reclaim their cultural and political sovereignty by being recognized by Congress. Over the last 30 years, economic development connected to reservations with the casino and hotel businesses has influenced results on and off American
Indian reservations (Akee, 2019). This economic shift for tribal nations has produced and provided ongoing opportunities for its tribal citizens, its community members, and employees. Moreover, historical trauma continues to such shifts resulting his harmful experiences Indigenous peoples.

**Theory of Historical Trauma Amongst Indigenous Americans**

The theory of historical trauma must be addressed as there is continuous annihilation, both physical and social, cognitive captivity, knowledge suppression, and cross-generational historical trauma experienced by Indigenous Americans. The theory explains the contemporary issues faced by many Indigenous communities today. Brave Heart & DeBruyn (1998) pioneered the notion of historical trauma by using literature on Jewish Holocaust survivors and their descendants to explain why certain Indigenous Americans face these significant challenges.

This theory illustrates how certain Indigenous Americans are always facing signs of historical loss such as diabetes, depression, drug abuse, poor parenting, imprisonment, poverty, and unemployment. This is a direct effect of the transfer of behavioral, cognitive, neurological, and physical stress resulting from previous generational losses such as the loss of culture, family, knowledge, land, language, philosophies, and spirituality (Brave Heart & DeBruyn, 1998).

Historical trauma has roots that predate the ethnocentrism of early European immigrants and missionaries. Indigenous communities grew from a basic foundation of the socio-cultural and sociopolitical that was bonded by damaged infrastructure. Through generations, many believe that the soul and the psyche of generations of Indigenous peoples have inherited frustration, pain, and loss of their ancestors (Brave Heart, 2001).
Historical Trauma

Indigenous Americans have also experienced tragedies that have resulted in historical losses (Brave Heart & DeBruyn, 1998; Coates, 2007; Whitbeck, et al., 2014). For the last 500 years, individuals from dominating European cultures have used settler colonialism and political laws under the guise of violence resulting in undo harm. These practices that have caused the intentional and systematic extermination of Indigenous American peoples (Plous, 2002). For example, Indigenous peoples in the United States have lost nearly 99% of the land they historically occupied (Wade, 2021). This theft led to unresolved trauma or bereavement, depression, increased mortality, an increase in alcohol misuse, child maltreatment, and domestic violence (Brave Heart, 2003). This phenomenon is known as historical trauma, which is described as cumulative emotional and psychological wounds brought on by enormous collective tragedies over the course of a lifetime and across generations (Brave Heart, 2001).

From the arrival of Columbus in America in 1492 and the founding of the United States in 1776, the population of Indigenous Americans in North America dropped by 95% as mass genocide was introduced (Plous, 2002). This drop may be explained by two major factors: (a) The purposeful massacres that happened when rewards (i.e., bounties) were put for the extermination of Indigenous People; and (b) The decline in the number of Indigenous Americans exposure to European pathogens (Trusty et al., 2002).

The majority of Indigenous Americans died as a result of their inability to withstand “diseases such as smallpox, diphtheria, measles, and cholera” brought to North America by these Europeans settlers (Trusty et al., 2002, p. 7). While some of the exposure to these illnesses was unintentional on the part of the Europeans, it has been documented that many times the Indigenous American people were purposely subjected to these diseases. In 1763, for instance,
Lord Jeffrey Amherst ordered his subordinates to introduce smallpox to the Indigenous American people through blankets offered to them (Plous, 2002).

Taking Indigenous American lands was a top priority for the majority of US government leaders in the nineteenth century (Duran, 2006). The Indian Removal Act of 1830, signed by President Andrew Jackson, established the use of treaties in return for Indigenous American territory east of the Mississippi River and forced the evacuation of up to 100,000 Native People (Plous, 2002). Economic motivations were frequently used to justify land seizure such as the Laramie Treaty of 1868 (Trusty et al., 2002).

The absence of public recognition of these deaths by the dominant culture and the rejection of Indigenous Americans' right to express appropriate grief contributed to this population loss's negative effects on the Indigenous American community. For example, a federal statute forbade Indigenous Americans from performing traditional rituals in 1883, mourning customs were interrupted and eliminated (Brave Heart et al., 2011). Up until 1978, when the American Indian Religious Freedom Act was passed, this law was in force. Because of their constant loss, disenfranchised sadness and spiritual sorrows, Indigenous Americans were unable to engage in customary grieving rituals (Brave Heart et al., 2011; Sotero, 2006). Because of this, future generations have been left with sentiments of guilt, helplessness, and inferiority as the dominant culture continues to destroy and shape Indigenous American culture (Brave Heart & DeBruyn, 1998).

Contemporary Challenges of Historical Trauma

The current challenges confronting Indigenous Americans may be the consequence of “a legacy of chronic trauma and unresolved grief over generations” inflicted on them by the European dominant culture (Brave Heart & DeBruyn, 1998, p. 60). The major characteristic of
historical trauma is that it is passed down to successive generations by biological, environmental, psychological, and social factors, culminating in a cross-generational historical trauma cycle that has not stalled (Sotero, 2006). Specifically, their bodies’ ability to deal with stress has been overwhelmed by the reoccurring thoughts related to historical losses they have suffered.

According to the findings of Doucet & Rovers’s (2010) study, three ways for trauma to be passed down to future generations have been identified: (a) children identifying with their parents' suffering, (b) children being influenced by the style of communication caregivers use to describe the trauma, and (c) children being influenced by specific parenting styles.

According to Myhra (2011), all participants in qualitative research evaluating revealed that the historical trauma was important in their elders' dysfunctional conduct, particularly substance misuse and destructive interpersonal interactions. Parental identification is a type of vicarious learning in which the kid identifies with trauma and adopts the symptoms of previous loss; This harmed several generations of Indigenous American children who were taken to boarding schools where their mental and physical health was neglected (Crenshaw et al., 1995; Dalkir, 2011). Counselors, psychologists, and psychiatrists believe that the notion of historical trauma is clinically appropriate to Indigenous Americans (Brave Heart, et al., 2011). Many Indigenous communities are currently dealing with persistent societal issues as a result of the loss of their traditional patterns, identities, relationships, and unsolved tremendous psychic traumas. Extreme socioeconomic inequities, such as poverty, substandard housing, and underemployment or unemployment, are still present in Indigenous communities today and can lead to long-term, severe trauma reactions in families. Socioeconomic disadvantages compromise the lack of security in cultural and political sovereignty and well-being while causing sickness, weariness, and anger. Social structural trauma brought on by geriatric attacks
on sovereignty and how the social structure has demoralized generational advancement (Kira, 2001). Social injustices, in conjunction with historical trauma, can eventually impede intellectual growth where knowledge evolution is stalled preventing growth within Indigenous communities.

Non-Hispanic Indigenous American adults are more likely than other racial groups to experience psychological discomfort, as well as to have worse overall physical and mental health and unmet medical and psychological needs than other minority groups (Barnes et al., 2010; Powell-Griner, 2010). Furthermore, Indigenous American adults and kids had greater suicide rates than the national norm, with suicide being the second leading cause of death for Indigenous Americans aged 10-34 (Barnes et al., 2010).

The bulk of Indigenous American lands had been taken over by the U.S. government by 1876, forcing the Indigenous Americans to live on reservations or move to new areas of the United States (Brave Heart & DeBruyn, 1998; Trusty et al., 2002). President Andrew Jackson approved the Indian Removal Act of 1830, initiating the use of treaties in exchange for Native American land east of the Mississippi River and forcing the relocation of as many as 100,000 Native Americans (Plous, 2002).

The agenda throughout the majority of history by U.S. government agencies, churches, and other enterprises was to encroach on the Indigenous American population and lands, leading to a disruption to the Indigenous American culture for the preponderance of the Native population (Brave Heart & DeBruyn, 1998; Garrett & Pichette, 2000).

This development of governmental confinement increased historical trauma as previous generations were forced to succumb to new laws and pressures of being seen as “savages.” This settler colonialism overshadowed the beauty found with Indigenous American communities. The majority of the time, reservations were not the finest places for farming and hunting (National
Indigenous American Museum of New York, n.d.). When Indigenous Americans were transported to metropolitan settings, they lost access to all of their customary ways of life (National Indigenous American Museum of New York, n.d.).

Many Indigenous American males were unable to support their families after leaving their homelands, and the families became reliant on supplies given by the U.S. government. This resulted in a deterioration in socioeconomic level for the Native American population (Brave Heart & DeBruyn, 1998; BigFoot & Winter, 2007; Beriter, 1985, Daniel, 2020). Many Indigenous Americans died as a result of these relocations, and families were split apart therefore causing the beginning cycle of historical trauma for Indigenous American peoples. Indigenous Americans have the lowest income, least education, and worst poverty level of any group—minority or majority—in the United States (Denny et al., 2005), as well as the lowest life expectancy of any other demographic (CDC, 2007).

There has been considerable doubt regarding the theory's validity due to the obscurity of some of the notions and the lack of empirical data (Evans-Campbell, 2008; Gone, 2009). There has been a paucity of research specifically on how previous atrocities faced by Indigenous Americans are linked to current difficulties in society. As there is limited research in the literature, research should continue to investigate the theoretical framework of historical trauma and how it applies to contemporary studies on the impact of trauma on an individual's cognitive, neurological, psychological, physical, and physiological functioning and cross-generational historical trauma transmission that extends beyond reservations (Goodkind, Hess, et al., 2012; Goodkind, LaNoue et al., 2012; Gottesman, 2016). Many Indigenous peoples have also experienced historical trauma linked to their incarceration (Goodkind, Hess, et al., 2012; Goodkind, LaNoue et al., 2012; Gottesman, 2016).
Incarceration

To secure land and resources for themselves and their interests, the Euro-American citizens committed mass genocide against the Native population in the second half of the nineteenth century. They did this by using democratic processes and political mechanisms. Reséndez (2016) states that “during the four centuries between the arrival of Columbus and the beginning of the twentieth century, some 2.5 to 5 million Native people were enslaved” (p. 1). Through a covertly planned and brutally effective sequence of petitions, referenda, town hall meetings, and votes at every level of California government, ideals of democracy—in this case, mob rule—were used to legalize the murder, rape, and slavery of thousands of Indigenous people.

Reséndez (2016) states that “during the four centuries between the arrival of Columbus and the beginning of the twentieth century, some 2.5 to 5 million Native people were enslaved” (p. 1). According to Reséndez (2016), “California may have entered the Union as a “free-soil” state, but American colonists had already discovered that the buying and selling of Native people was a common practice” (p. 5). Beginning in 1771, Spanish missionaries recruited Indigenous Americans, and over the next fifty years of missions throughout California, oversaw an “often brutal and coercive campaign devised to destroy Indian cultures and convert Indians to Christianity” by incarcerating them (Singleton, 2004, p. 50). Many tribes throughout California succumbed to the ongoing pressures of missionization and urbanization (C. Jones, 2002; Singleton, 2004).

Madley (2015) explains that “from 1846 onward, at least 20,000 California Indians worked in varied forms of bondage under U.S. rule” (p. 626). Hernández (2014) states that “throughout the 1850s and 1860s, California Indians had comprised the majority of caged men
and women in Los Angeles” (p.55). Hernández (2014) continues by stating that “disease, broken treaties, forced labor, incarceration, reservations, and genocidal violence pushed the California Indian population toward critical lows in towns and cities across the state at the same time that the mass in-migration of Anglo-American settlers tipped the population of Los Angeles from a Native and Mexican American majority to an Anglo-American majority” (p.55).

Madley (2015) states that “the large scale of unfree California Indian labor under U.S. rule was the product of supply (provided by a large California Indian population), demand (driven by a rapidly expanding labor market), and, most importantly, political will (informed by racism and expressed in legislation and governmental policies)” (p. 627). Singleton (2004) states that “in the early twentieth century, anthropologists and government officials proclaimed many California Indian tribes extinct because of the effects of colonization-violence, disease, and urbanization” (p. 4).

In the 1800s, California's state constitution forbade slavery, but the Act for the Government and Protection of Indians of 1850 permitted the indenture of Native Californians (Magliari, 2004). According to Waite (2021), “Under the law, Anglo and Hispanic heads of household could seize Native children from their families and use them as unpaid servants until they reached adulthood—or died” (para. 9). Additionally, “A petitioner merely had to bring a child’s “friend” before the court, have the friend corroborate that the parents were unfit to raise the child, and then claim legal guardianship for themselves. Who qualified as a friend was left to the discretion of the court” (para. 9). The legislation also permitted a new system of convict leasing, a form of forced labor that was previously used in the South of the United States, as well as a system of custodianship for indigenous children. These regimes were supported by the
legalization of corporal punishment against any Indigenous peoples and the deprivation of many of their legal rights (Madley, 2016).

Once the Indigenous Americans had entered into this servitude, the term limit was often ignored, thus resulting in slavery. Magliari (2004) states that this is what California explained was the way to “satisfy the state’s high demand for domestic servants and agricultural laborers” (p. 349). Waite (2021) states that “the Gold Rush marked the beginning of what modern historians rightly regard as a genocide of California Indians, in which the Indigenous population plummeted from about 150,000 in the late 1840s to 30,000 roughly two decades later” (para. 6).

The incarceration of Indigenous Americans through forced labor still occurs to date. According to a study of the 2010 Census (U.S. Census Bureau, 2006), 37,854 Indigenous Americans, comprise of 32,524 males and 5,132 women (plus 198 people aged 17 or younger), were found in adult correctional institutions (para. 2). This is more than double the imprisonment rate for white Americans (510 per 100,000), which is comparable to a total incarceration rate of 1,291 per 100,000 persons (U.S. Census Bureau, 2006, para. 2). Indigenous Americans imprisonment rates can be up to seven times higher than those of whites in states with sizable Indigenous populations, such as North Dakota (U.S. Census Bureau, 2006, 2006, para. 2). Reséndez (2016) states that Indigenous Americans were subjected to a parallel system of bondage over a four-hundred-year experience that had remained hidden and poorly understood. Though Indigenous Americans have been subjected to ongoing conflict, they overcame political and social hardships by reclaiming their identity through cultural sovereignty and protecting their political sovereignty against the same systems established to eradicate them. They were able to overcome their past by empowering their present. Indigenous peoples have long been confined,
denied their histories, traditional territories, and access to thousands of sacred sites, and succumbed to foreign entities' expectations. Even in the face of enormous difficulties, Indigenous peoples are currently on a healing journey. Indigenous Americans' way of life and relationships are evolving despite being physically and socially incarcerated due to the revival of tradition, the preservation of significant cultural components, and, most importantly, the sharing of tales of adversity and hope which has promoted their ability to self-govern through tribal gaming.

**Tribal Gaming**

Tribal gaming has changed how many sovereign countries in the United States exist and operate because of the creation of a distribution of culture, knowledge, and sovereignty. There were 460 tribal gambling businesses in 2011, with a total yearly income of $27 billion, managed by 240 tribes (Akee, 2019; National Gaming Commission, n.d.). Over the last 30 years, economic development connected with the casino business has influenced results on and off Indigenous American reservations (Akee, 2019). In the 1970s, several tribes began operating bingo halls to earn cash to pay for tribal government operations (National Gaming Commission, n.d.). According to Slawny, n.d. and Spilde & Taylor (2013), these contract negotiations, as well as tensions between states and tribes, have posed a significant challenge for Indigenous American communities, as they have resulted in state encroachment on tribal sovereignty, a lack of political capital for Indigenous issues, and discrimination against Native American tribes.

Several state governments were looking to enhance state revenue through state-sponsored gaming. Several states had legalized charitable gambling by the mid-1980s and were even financing state-run lotteries (National Gaming Commission, n.d.; Spilde & Taylor, 2013). States may think that gaming on reservations detracts from economic activity in adjacent areas by

The main contention was whether tribal governments could operate gaming without regard to state law (Light & Rand, 2004). Although many lower courts agreed with the tribes in early cases, the issue was not finally settled until 1987, when the United States Supreme Court confirmed tribal governments' inherent authority to establish and regulate gaming operations independent of state regulation, provided the state in question allows some form of gaming (Light & Rand, 2004; Mezey, 1996; National Gaming Commission, n.d.; Spilde & Taylor, 2013).

The issue of tribal gaming was brought up in Congress, and a series of hearings were held, resulting in the passing of the Indian Gaming Regulatory Act of 1988 (National Gaming Commission, n.d.). A compromise between state and tribal interests was enshrined in this Act. According to the National Gaming Commission (n.d.), the states were offered a voice in determining the scope and extent of tribal gaming by requiring tribal-state compacts for Class III gaming, but tribal regulatory authority over Class II gaming was preserved in full. The Act further provided for general regulatory oversight at the federal level and created the National Indian Gaming Commission as the primary responsible federal agency (National Gaming Commission, n.d., para. 3). The Act also established basic federal regulatory authority and established the National Indian Gaming Commission as the primary federal institution responsible (Light & Rand, 2004; Mezey, 1996; Spilde & Taylor, 2013).
The Indian Gambling Regulatory Act, enacted in 1988 as Public Law 100-497 and codified as 25 U.S.C. 2701, established the current jurisdictional framework for gaming on reservations (National Gaming Commission, n.d.). The Act codified a compromise between state and tribal interests. States were granted a vote in defining the extent and breadth of tribal gambling by requiring tribe-state compacts for Class III gaming. In contrast, tribal regulatory jurisdiction over Class II gaming was entirely preserved (National Gaming Commission, n.d.).

Traditional gambling and social gaming for low stakes are classified as Class I gaming. Tribal governments have regulatory jurisdiction over Class I gambling (National Gaming Commission, n.d.). If bingo, punch boards, and other games like bingo are played in the same location, they are classified as Class II gaming (National Gaming Commission, n.d.). Non-banked card games, or games played just against other players rather than the house or a player serving as a bank, are also included in Class II gaming (National Gaming Commission, n.d.). Slot machines and computerized facsimiles of any game of chance are expressly excluded from the definition of Class II games under the Act (National Gaming Commission, n.d.).

Suppose the state they are located allows it for whatever reason, and the tribal government adopts a gaming act that the Commission authorizes. In that case, the Tribes have the authority to operate, license, and regulate Class II gaming (National Gaming Commission, n.d.). Tribal governments oversee most Class II gaming (National Gaming Commission, n.d.). The phrase “Class III gaming” covers a wide range of activities; It refers to any game that is not recognized as Class I or II. Casino games such as slot machines, blackjack, craps, and roulette, as well as electronic versions of any game of chance, would be classified as Class III (National Gaming Commission, n.d.). The following elements must be completed before a tribe can legally operate Class III gaming. First, the type of Class III gaming the tribe wishes to engage in must be
legal in the state where the tribe is located (National Gaming Commission, n.d.). Second, the tribe and the state must have negotiated a compact with the Secretary of the Interior, or the Secretary must have approved regulatory processes; and third, the tribe must have established a tribal gaming law with the Chair of the National Indian Gaming Commission (NIGC)’s approval (National Gaming Commission, n.d.).

Many Indigenous communities' casinos fail because of market conditions, a lack of local demand, or bad management, resulting in the tribe's hard-earned money being wasted. In particular, tribal finances. According to Schaap (2010), while some tribes hurry to capitalize on gambling due to significant national demand, they frequently fail to adequately adapt their expectations to local economic conditions and fail to develop viable long-term marketing and management, so casino management frequently affects tribal initiatives and strategy.

By universalizing enterprise-wide policies within casinos, tribal citizens, tribal officials, community members, employees, and even local and state governments may be able to reach mutually advantageous agreements to spur the growth of knowledge infrastructure. The objective is to inform how learning and development measures and programs can ensure that the parties involved understand their role in contributing to the success of sovereign nations through tribal gaming.

This will be crucial in molding constituents' and stakeholders' perceptions of their roles in the community. One of the most effective ways to promote this is to educate tribal citizens and community members at a young age about the difference between traditional tribal beliefs, such as folklore surrounding luck and spirit guidance and practical wisdom to help avoid gambling and excessively wasteful spending of money (Light, 2004; Mezey, 1996; Schaap, 2010; Spilde & Taylor, 2013).
Financial responsibility and community service should be emphasized to assist these citizens and members in understanding their part in the casino's and the tribe's overall success. Through practical changes to their enterprises' management structure, this knowledge infrastructure would promote engagement in a solution (Light & Rand, 2004; Mezey, 1996; Spilde & Taylor, 2013). Previously unfavorable attitudes may be transformed, and all community members can actively participate in the enterprise's success by assuring that community people not only gain economically from casinos but also understand their role in helping their Tribe prosper.

Furthermore, by advancing learning and development programs, policies that could be implemented in response to the social problems that arise from casinos will be established, emphasizing that their responsibility extends beyond a gaming paycheck and that a collective effort to advance knowledge infrastructure to make the reservation a better place is required (Light & Rand, 2004; Mezey, 1996; Spilde & Taylor, 2013).

As a result, considering gaming in Indigenous communities demands a multifaceted approach and will need multi-year action plans that considers a variety of cultural, social, and political challenges (Slawny, n.d., Spilde & Taylor, 2013). Tribes must be prepared to involve all constituents and stakeholders in the success of their enterprises, including non-tribal state actors who must agree to and benefit from negotiating their gaming compacts, tribal citizens who must be taught financial and community responsibility, and tribal adults who must actively participate in casino and community management (Slawny, n.d.).

It will be tough to change mindsets from passive payout receivers to engaged tribe leaders who work together to make their enterprises a success. Suppose Indigenous tribes are to turn a casino's pure financial success into meaningful improvements in their community's quality
of life. In that case, all stakeholders must remain active and positive in developing learning and development programs to build the necessary knowledge infrastructure for future generations by reinvesting profits from tribal gaming to deploy said programs (Slawny, n.d.).

**Learning and Development**

Sovereign nations would also benefit from an organized learning and development department, providing them with a consistent learning experience and the necessary expertise to drive consistency and growth (Dam, 2018; Knowles, 1984). Consistency is particularly significant for essential policies and procedures as it establishes knowledge infrastructure with a framework of the expectations and procedures within the sovereign nation (Dam, 2018). Figure 2 details the four components of knowledge infrastructure based on epistemological and ontological approaches.

**Figure 2**

*Building Knowledge Infrastructure*

<table>
<thead>
<tr>
<th>LEARNING JOURNEYS</th>
<th>LEARNING PATHWAYS</th>
<th>KNOWLEDGE ACQUISITION</th>
<th>LEARNING &amp; DEVELOPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Framework</td>
<td>Learning Pathway is defined as a learner's selected path via a variety of (usually) e-learning activities that allows them to gradually develop knowledge. The control of decision shifts from the instructor to the learner through learning paths.</td>
<td>Knowledge acquisition is the gathering or collection of knowledge from many sources in order to add new knowledge to a knowledge base while also refining or updating existing knowledge.</td>
<td>Learning and development is a way for enhancing an employee's abilities, knowledge, and competency in the workplace, resulting in increased productivity.</td>
</tr>
</tbody>
</table>
Learning and development programs provide a forum where knowledge acquisition occurs. This knowledge acquisition develops learning pathways for the personal and professional self; through these pathways, a learning knowledge continuum can be cycled through loop learning processes, which will be discussed in following sections. Employees who participate in learning and development programs will feel that they are part of a supportive, respected work environment, which will boost their morale and allow them to approach their job tasks with more confidence (Dam, 2018).

Employees gain confidence through learning and development tools since they better understand their job duties and responsibilities (Dam, 2018). This self-assurance may motivate them to improve their performance and develop fresh ideas to assist them in succeeding (Dam, 2018). When an enterprise's personnel are subjected to frequent training, their job skills improve, and they work more professionally and productively (Dam, 2018). Employee retention improves when the learning and development staff is empowered.

Although employee retention is an important Human Resources goal, learning and development programs have various other benefits that directly impact an enterprise's bottom line (Dam, 2017). Those in charge of an enterprise's learning and development must first identify skill gaps among individuals and teams, then design and implement training to address those gaps by reskilling and upskilling employees (Dam, 2018). According to learning and development management, employees must be able to satisfy the demands of their employment and be appropriately linked with the enterprise's business goals. An enterprise must ensure that its employees work in a safe and productive environment (Dam, 2018).

Sovereign nations should collaborate with Indigenous communities, learning enterprises, researchers, and teachers to provide classroom-ready resources, instructor-led eLearning, and
workshops with various topics and formats. Employees can learn about sovereign countries through digital literacy courses, educational intranet websites, interactive job aids, and movies. Primary and secondary sources, tribal council opinions, tribal pictures, and tribal artifacts should all be included in classroom resources as well. Lesson plans and learning pathways with skills-based assessments for employees should be included as a part of employee’s benefits in working for a sovereign nation.

Learning and development resources must be factual, up-to-date, vetted, and culturally suitable. Furthermore, the learning and development programs should provide Tribal Members, community members, and current and former employees with engaging personal and professional development programs in various mediums, such as conference presentations, eLearnings, internships, instructor-led training, residencies, and conference presentations. Employees should be provided with the necessary training by the learning and development team, allowing the enterprise to confidently create meaningful experiences that thoroughly comprehend their nation's cultures, present and traditional knowledge, and histories (Dam, 1998).

Different communities have different conceptions of human behavior, learning, and knowledge (Entwistle & Entwistle, 1992; King et al., 1983; Ryan, 1984; Sternberg, 1985; Vermunt & van Rijswijk, 1988), which influence how their members approach learning tasks and interact with others (Entwistle & Entwistle, 1992; King et al., 1983; Ryan, 1984; Sternberg, 1985; Vermunt & van Rijswijk, 1988). Such viewpoints are referred to as “intuitive psychology” (Carey, 1985) or “epistemology” (Ryan, 1984; Strike & Posner, 1985). These concepts provide a framework for people to comprehend and explain events such as school learning and intelligent behavior which may affect how they act (Sternberg, 1985).
Traditional Indigenous Knowledge

Traditional Indigenous knowledge is a collection of beliefs, traditions, and information aimed at conserving, transmitting, and contextualizing Indigenous cultural and geographical linkages over time (Bruchac, 2014). Bruchac (2014) states that:

Indigenous bits of knowledge are conveyed formally and informally among kin groups and communities through social encounters, oral traditions, ritual practices, and other activities such as oral narratives that recount human histories; cosmological observations and modes of reckoning time; symbolic and decorative modes of communication; techniques for planting and harvesting; hunting and gathering skills; specialized understandings of local ecosystems; and the manufacture of specialized tools and technologies (e.g., flintknapping, hide tanning, pottery-making, and concocting medicinal remedies). (p. 1)

Bruchac (2014) states that “indigenous communities have devised distinctive methods of encoding useful data within philosophies of thought and modes of activity that are linked to particular landscapes” (p. 1). This type of “data includes geographical, genealogical, biological, and other evidence that maps human relations to flora and fauna, land and water, and supernatural forces” (Bruchac, 2014, p. 1). Regular Indigenous performances, which include ritual, dance, oral traditions, and songs that transmit factual and symbolic truths about these connections, are typically used to pass down traditional indigenous knowledge. To keep these traditions alive, individuals and families with abilities are charged with preserving esoteric information (Bruchac, 2014).

Although ethnographic and ethnohistorical research has found and recorded many aspects of traditional indigenous knowledge, some remain unknown to outsiders (Bruchac, 2014).
Traditional Indigenous knowledge can be thought of as a hereditary system of learned awareness and competence that allows for the acquisition of wisdom and the construction of tools (Bruchac, 2014). Indigenous peoples worldwide have maintained distinct understandings based on a cultural experience that has influenced human, nonhuman, and other-than-human interactions in specific locations over time (Bruchac, 2014). These understandings and relationships make up traditional Indigenous knowledge, a system within knowledge infrastructure. Indigenous traditions can supply information and insight to researchers; this localized knowledge can help explain and understand scientific data (Bruchac, 2014). Researchers should communicate with local Indigenous knowledge-bearers to ensure ethical practice and limit unnecessary harm to sensitive areas and activities (Bruchac, 2014).

All members of a tribal community, ethnic group, kin network, or family share traditional Indigenous knowledge through knowledge acquisition (Bruchac, 2014). Many learnings come from ordinary activities and phenomenological experiences (Bruchac, 2014). Gatekeepers (such as tribal leaders, ritual practitioners, and medicine people) with vested interests, extensive knowledge, and long-standing relationships with vital sites hold more technical information (Bruchac, 2014). Oral history keepers are typically instructed to relate pieces of traditional narratives to specific events and locations, and cultural coherence is maintained by repetition (Bruchac, 2014).

Oral traditions are traditional knowledge that can teach, transfer, and reinforce other types of information, whether delivered as historical stories or legends (Bruchac, 2014). Indigenous knowledge that pre-dates colonialism was once regarded as primitive and unsophisticated; this cultural bias historically obscured the structure and practice of this knowledge (Bruchac, 2014). Western practitioners severely threatened Indigenous cultural
Traditions and territory by treating them as public scientific property (Bruchac, 2014). Traditions are the bedrock of all human knowledge, passed down from one generation to the next, from one culture to the next (Bruchac, 2014). Apffel-Marglin (2011); Augustine (1997); Smith (2012) state that “Indigenous knowledges, by comparison, are inherently holistic and integrative, being rooted in sensory awareness and human experience of the complex relationships among multiple organisms in distinct ecosystems” (as cited in Bruchac, 2014, p. 5).

The study of Indigenous Americans' cultures, cultural variety, cultural sensitivity, personal and professional growth, and measures to protect the nation for the next generations should all be part of being a learning sovereign nation in the twenty-first century. Human socialization produces sound tribal awareness and culture (National Geographic, 2020; Smithsonian, n.d.; Tribal College Journal of American Indian Higher Education, 2012). Indigenous tribes have their own distinct cultures and ways of life that reach back to the start of time (Smithsonian, n.d.; Tribal College Journal of American Indian Higher Education, 2012).

Indigenous Americans have been shaped by their culture and environment since immemorial, despite centuries of colonialism (National Geographic, 2020; Smithsonian, n.d.). Elders have passed on traditional knowledge through their arts, music, ceremonies, customs, social behaviors, and tribal languages to educate the next generation about their beliefs, traditions, and values (Smithsonian, n.d.; Tribal College Journal of American Indian Higher Education, 2012).

Through cultural persistence, creative adaptation, renewal, resilience, and sovereignty, Indigenous Americans continue to battle for the integrity and vitality of Indigenous civilizations. Indigenous Americans' stories in the Western Hemisphere are inextricably linked to places and ecosystems (National Geographic, 2020; Smithsonian, n.d.; Tribal College Journal of American
Indian Higher Education, 2012). Long-term possession of tribal homelands and observation and interaction with places result in Indigenous knowledge systems (National Geographic, 2020; Smithsonian, n.d.). Indigenous Americans understand that humans are a part of the environment and value the connection between the environment and cultural traditions (National Geographic, 2020; Smithsonian, n.d.; Tribal College Journal of American Indian Higher Education, 2012). Indigenous peoples have studied, governed, honored, and prospered in their homelands for thousands of years. These foundations continue to impact how Indigenous Americans engage with the land today.

According to the Smithsonian Institution (n.d.), Indigenous Americans have always participated and functioned within self-defined social structures, including institutions, enterprises, and communities, each with specific functions. These societal institutions have shaped Indigenous Americans' lives and histories up to the present day. Indigenous American individuals, groups, and institutions have been greatly influenced by external educational, political, and religious institutions (Tribal College Journal of American Indian Higher Education, 2012). Indigenous peoples have pushed back against these influences and, when required, adapted to them. Many Indigenous American institutions are hybrids of [Indigenous] and [Western] structures, reflecting external influences and [Indigenous] adaptability.

Indigenous Americans now work in several industries, assist in forming economic policies in their countries, and own and manage natural resources that impact the consumption and distribution of goods, production, and services throughout much of the United States. Indigenous peoples have always been involved with communities outside of their own. Indigenous peoples have traded arts, goods, ideas, and technologies with other tribal cultures regionally and globally for millennia. The extension and deepening of global ties occurred from
contact with Europeans. Indigenous Americans contributed to the contemporary world's growth through the use of Indigenous knowledge to advance technology, grow food, produce labor and wealth.

Due to the technological age, working and living conditions have changed dramatically in the recent decade within reservations (Dam, 1998). Knowledge is essential in modern society's social, political, and economic relationships. Nonetheless, the researcher suggests that new circumstances necessitate a new perspective to advance traditional Indigenous Knowledge through loop learning and technology. As loop learning and technology has progressed over the last half-century, the social significance of building knowledge infrastructure within sovereign nations for future generations has shifted dramatically.

**Loop Learning**

Loop Learning theories have evolved over the decades and can provide the needed foundation for knowledge infrastructure. Organizational literature (Argyris & Schön, 1974; Flood & Romm, 1996; Snell & Chak, 1998) has identified distinct levels of learning: single-loop, double-loop, and triple-loop-learning. Loop learning has evolved from acquired knowledge from generational observing and mastering skills passed on by one’s family to knowledge construction. Knowledge construction occurs in these loop learnings as training units (i.e., core competencies, experience, and hard and soft skills).

**Single-Loop Learning**

Argyris (1976) popularized the term Single-Loop Learning “to describe error catching and correcting activities that do not involve a change in foundational assumptions” (p. 329). Argyris and Schön (1978) state that Single-Loop Learning executes assigned tasks to avoid the consequences of low performance; it ignores the origin of a realized problem, failing to question
why it occurred. Sovereign nations must include learning and development strategies to have their employees advance beyond Single-Loop Learning. As shown in Figure 3, this Single-Loop Learning framework can improve Indigenous Americans’ learning through a lifelong learning development approach.

Figure 3

*Single-Loop Learning*

![Single-Loop Learning Diagram](image)


**Double-Loop Learning**

Argyris (1976) states that Double-Loop Learning is a selective cognitive process that evolves from single-loop learning by questioning the root of a problem, whereas Single-Loop Learning has a singular process (i.e., the action assigned = action completed). Tagg (2010) declares that Double-Loop Learning (see Figure 4) drives employees in the direction toward the advancement of knowledge and provides opportunities within enterprises to rethink what training is being curated, developed, implemented, and taught, how this curriculum is functioning (i.e.,
Instructor-Led or eLearning), and ultimately what and where the curriculum will be utilized most effectively.

**Figure 4**

*Double-Loop Learning*

![Double-Loop Learning Diagram]


*Triple-Loop Learning*

Kelloway et al. (2012) state that Triple-Loop Learning (see Figure 5) has drawn more study attention than all other theories of leadership combined. Kelloway et al. (2012) also argues that Triple-Loop Learning can be a bedrock of learning communities and is socially desired because it is constructive and paradoxical; it entails two concurrent dynamics to implement successfully, knowledge infrastructure, a desire to change, and resistance to change. Tribal leaders could build a deeper awareness of the benefits and dynamics involved in Triple-Loop Learning to drive initiatives in developing their community members.
Paul et al. (2012) argue that Triple-Loop Learning is the most crucial concept for promoting enterprise learning successfully implemented. Triple-Loop Learning can positively impact enterprise behavior and ergonomics and contribute to changes in initiatives, job performance, objectives, policies, mental maps, and systems thinking, all needed to continue knowledge infrastructure to maintain generations (Paul et al., 2012). Flood et al. (1996) state that challenging more extensive each loop learning is found at different cognitive levels, employees with enterprises may reach an authentic awareness by understanding the more considerable interpretation of what is being changed, the potential benefits of the change, and how learning strategies will positively create an enterprises promotion within themselves, their team, and the enterprise itself.
Bloom’s Digital Taxonomy - Learning Framework

By establishing learning outcomes, focusing on teaching, and assisting in the clarification, organization, and prioritization of learning processes, learning objectives help to clarify, organize, and prioritize learning processes for better strategies. These objectives allow students to keep track of their progress and motivate them to take care of their education. Bloom (1956) developed “Bloom's Taxonomy,” which he and his collaborators divided into six major categories: knowledge, comprehension, application, analysis, synthesis, and evaluation. Bloom (1956) defines these categories:

- Knowledge involves the recall of specifics and universals, the recall of methods and processes, or the recall of a pattern, structure, or setting.
- Comprehension refers to a type of understanding or apprehension such that the individual knows what is being communicated and can use the material or idea being communicated without necessarily relating it to other material or seeing its fullest implications.
- Application refers to the use of abstractions and concrete situations.
- Analysis represents the breakdown of a communication into its constituent elements or parts such that the relative hierarchy of ideas is made clear and/or the relations between ideas expressed are made explicit.
- Synthesis involves the putting together of elements and parts to form a whole.
- Evaluation engenders judgments about the value of material and methods for given purposes (pp. 201-207).

Sneed (2020) states that creating authentic learning experiences is essential to advancing knowledge. Lightle (2011) states that collaboration, innovation, and individual exploration must provide learning experiences and outcomes where learning outcomes are met, as shown in
Bloom’s Taxonomy (see Figure 6). As technology becomes an ever-increasingly important aspect of learning, Bloom's Digital Taxonomy strives to expand on the basic competencies and additional skills connected with each level (Drucker, 1991; Duran & Duran, 1995). This updated version is applied in sovereign states as cognitive vehicles for shifting thinking at various levels of their businesses. Practitioners in learning and development have devised novel ways to link digital knowledge acquisition, resulting in the creation of a Digital Bloom's Taxonomy. Sneed (2020) states that the activities that are present in corporate enterprises are found within Digital Bloom’s Taxonomy include:

“Creating: To produce new or original work.

- Tools – Animating, blogging, filming, podcasting, publishing, simulating, wiki building, video blogging, programming, directing” (para. 4).

“Evaluating: To justify a stand or decision; to make judgments based on criteria and standards through checking and critiquing.

- Tools – Grading, networking, rating, testing, reflecting, reviewing, blog commenting, posting, moderating” (para. 5).

“Analyzing: To draw connections among ideas and. Its concepts determine how each part connects to an overall structure or purpose.

- Tools – Mashing, mind mapping, surveying, linking, validating” (para. 6).
“Applying: To use information in new situations, such as models, diagrams, or presentations.

- Tools – Calculating, Charting, editing, hacking, presenting, uploading, operating, and sharing with a group” (para. 7)

“Understanding: To explain ideas and concepts or construct meaning from written material or graphics.

- Tools – Advanced searching, annotating, blog journaling, tweeting, tagging, commenting, subscribing” (para. 8)
“Remembering: To recall facts, basic concepts, or retrieval of material.

- Tools – Bookmarking, copying, googling, bullet-pointing, highlighting, group networking, searching” (para. 9).

To effectively handle this knowledge, the most appropriate digital activity will be picked based on the activity's difficulty level concerning Bloom's Revised Taxonomy's cognitive levels. Meyer (2010) states that “knowledge is situated, being in part a product of the activity, context, and culture in which it is developed and used. In this way, we can begin to ascertain differences that will help instructors apply the right tool to the right learning goals” (p. 226). Knowledge is co-constructed, and individuals learn from one another, according to Vygotsky's (1978) social constructivist theory. The individual, according to Vygotsky, must be actively involved in the learning process. Vygotsky (1978) emphasized the importance of social contact in forming cognition, believing that the community of practice plays a critical part in the “creating meaning” process by leveraging Bloom's Revised Taxonomy within learning strategies.

**Learning Strategies**

Learning strategies have become a secondary concern for most enterprises (Cook & Glass, 2015; Jehn et al., 2010; Whiteley, 2004). Research (Cook & Glass, 2015; Peterson, 1999; Rupert et al., 2010; Williams & O'Reilly, 1998) has focused on performance and organizational outcomes by operationalizing learning strategies. There are benefits of learning strategies (Kay & Gorman, 2012; Medina, 2017; Peterson, 1999; Stewart et al., 2008) and disadvantages of learning strategies (Milliken & Martins, 1996; Pitts, 2006; Whiteley, 2004) which include: (1) there are mixed definitions, and reviews on learning strategies within enterprises, (2) the implementation of effective learning strategies are multifaceted processes that continue to be ongoing challenges within enterprises (Horwitz & Horwitz, 2007; Jehn & Bezrukova, 2004; Jehn
et al., 2010; Joshi & Roh, 2009; Kay & Gorman, 2012; Medina, 2017; Milliken & Martins, 1996; Pitts, 2006; Rupert et al., 2010; Whiteley, 2004; Williams & O'Reilly, 1998). As these firms struggle to develop, implement, and understand knowledge management, learning strategies are needed within sovereign nations.

The public and private sectors have begun to develop an interest in implementing purposeful learning strategies. Beyond rhetoric, learning tactics work best when people try to explicitly encode their information into a shared knowledge repository, such as a database, as well as retrieve the knowledge that others have supplied (i.e., codifications, perpetuating racial power, and partiality on legally promoting racial equity; Rishe et al., n.d.). Whiteley (2004) agrees with researchers (Ayoko & Härtel, 2006; Jehn et al., 2010; Kay & Gorman, 2012; Peterson, 1999) who assert that learning strategies vary within individual enterprises and should focus on establishing a sound knowledge infrastructure to advance employees and the firm itself beyond performance outcomes.

Enterprises have encountered a prodigious demographic shift and have increased learning strategies as a competitive advantage to align with industry trends (Ayoko & Härtel, 2006; Cook & Glass, 2015; Jehn et al., 2010; Whiteley, 2004). Knowledge sharing is creating a culture that encourages people to share information based on the idea that knowledge is not irreversible and should be shared and updated to stay current; Gupta & Sharma, 2004; Snowden, 2002).

According to Alavi and Leidner (2001), businesses should seek knowledge management to (a) make more knowledge material available in the development and provision of products and services; (b) save expenses; (c) manage corporate settings, and allow employees to gain relevant insights and ideas related to their work; (d) resolving intractable or wicked challenges; (e) leveraging expertise within the business; (f) increasing network connectivity between internal
and external personnel; (g) resolving intractable or wicked challenges; and (h) managing the workforce's intellectual capital and assets such as important knowledge and expertise held by key individuals or maintained in repositories (Gupta & Sharma, 2004).

According to Levy (2011), knowledge retention is a component of knowledge management. When experienced employees depart enterprises within sovereign nations after a long career, knowledge retention is lost (Levy, 2011; Urbancova, 2012). Knowledge retention reduces the loss of intellectual capital and allows for more efficient operations to assure knowledge continuity (Levy, 2011; Urbancova, 2012).

**Transformational Leadership Within Learning and Development**

According to Gabrielsson et al. (2009), international-based enterprises must focus on transformational leadership team building across the cultural boundaries with which they are associated in a global context heavily influenced by globalization's concerns and opinions. Many facets of transformative leadership are explored when leadership dimensions are combined with socio-cultural dimensions (Jehn et al., 2010; Peterson, 1999; Rupert et al., 2010). The process of team building was a recurring motif in the literature. Within the confines of an operational team, this procedure entails applying the crucial paradigm of leadership style balance and support (Gabrielsson et al., 2009). This strategy is focused on emotions, values, ethics, norms, and long-term goals, according to Northouse (2016). The notion of transformative leadership is well-developed, rapidly increasing, and commonly applied inside sovereign governments. The research produced a variety of helpful methods that can provide long-term results for nations and tribes when implemented by leaders.

Building a knowledge infrastructure within sovereign nations interested in transforming their enterprises will require that diversity, equity, and inclusion and multiculturalism are
acknowledged and understood. Learning analytics draws on the positive impact of 21st-century skills on learning strategies. There needs to be a promotion of high levels of ethics and privacy, together with openness and transparency, when using individual data about learning and education. It is essential to understand the transition of individuals between education and other sectors of society, like professional growth. According to Sun and Henderson's (2016) research, transformative leadership and organizational processes were emphasized because their impact on the individual, group, and organizational outcomes has been well demonstrated. These outcomes include “higher subordinate job satisfaction, cooperation, organizational citizenship behaviors, commitment, performance information use, perceived work quality, and mission valence” (Sun & Henderson, 2016, p. 554).

According to Northouse (2016) and Pradhan and Pradhan (2015), “transformational leadership is part of the new leadership paradigm that provided more attention to the charismatic and affective elements of leadership such as emotions, ethics, long-term goals, standards, and values. This type of leadership includes assessing followers’ motives, satisfying their needs, and treating them as full human beings” (Northouse, 2016, p. 161). Pradhan & Pradhan (2015) agree with the authors (Jehn et al., 2010; Northouse, 2016; Peterson, 1999; Rupert et al., 2010) in that transformational leadership also involves a distinctive form of influence. Transformational leaders, according to Pradhan & Pradhan (2015), inspire followers with their compelling vision and moral leadership to “exert more effort and engage them in extra-role behaviors which are not an explicit part of their job description” (p. 227). According to Northouse (2016), transformational leadership can create a broad endeavor to impact entire enterprises and even entire civilizations.
According to Pradhan and Pradhan's (2015) empirical study of the relationship between transformational leadership and affective enterprise commitment. Pradhan and Pradhan (2015) investigated the impact of an overall commitment to the enterprise on contextual performance. The authors discovered that transformative leadership impacted the display of discretionary prosocial actions. Contextual performance refers to these favorable desirable actions that contribute to an enterprise's overall performance (Jehn et al., 2010; Northouse, 2016; Peterson, 1999; Pradhan & Pradhan, 2015; Rupert et al., 2010).

Today's businesses face a huge challenge building fully engaged and dedicated workforces. According to Pradhan & Pradhan (2015), previous transactional leadership strategies have failed. These management styles frequently strive to attract and keep the finest employees by providing higher salaries, incentives, and perks. Although these transactional methods provide immediate relief, Pradhan & Pradhan (2015) feel that more is needed to keep talented people on the job for long periods and to close the talent gap. To engage or include employees in the growth of an enterprise, more than just exchanging human and social capital is required. Because leadership is one of the most powerful forces that can dramatically improve an enterprise's performance and fortunes, businesses must develop relationships that turn superiors and subordinates into partners on a quest for a common enterprise goal, making the requirement of contribution a new development measure in how they perform through communities of practice (Jehn et al., 2010; Northouse, 2016; Peterson, 1999; Pradhan & Pradhan, 2015).

**Communities of Practice**

Communities of practice (CoP) is a group of individuals who share a concern or a love for what they do and learn how to do it better by regularly interacting (Wenger, 1998; Wenger et al., 2002). A CoP systematically examines the interaction of community, social practice,
meaning, and identity (Lave & Wenger, 1991; Wenger, 1998). As a result, a comprehensive conceptual framework for thinking about learning as a social participation process has emerged (Lave & Wenger, 1991; Wenger, 1998). The members' shared interest in a certain topic or area can lead to the formation of a CoP. It might be made to gain information on a specific topic (Lave & Wenger, 1991). Members learn from one another and can grow personally by sharing information and experiences with the group (Lave & Wenger, 1991). The concept is based on American pragmatism, particularly C. S. Peirce's concept of “community of inquiry” (Shields, 2003), as well as John Dewey's tenet of “learning by doing” (Wallace, 2007).

Wenger (1998) maintains that the structural characteristics of a CoP are again redefined to a domain of knowledge, a notion of community, and a practice:

- **Domain:** People are brought together by a domain of knowledge, which inspires them to participate, leads their learning, and gives meaning to their activities (Wenger, 1998). Members participate in collaborative activities and discussions to pursue their interests in their domain, support one another, and share information (Wenger, 1998). They form bonds with one another to learn from one another, and they are concerned about their standing (Wenger, 1998).

- **Community:** To pursue their passion for their subject, members collaborate on events and debates, support one another, and share information (Wenger, 1998). They develop ties with one another so that they can learn from one another and are concerned about their situation. To connect and flourish as a CoP, members do not need to share the same job or title. They will only be able to build a practice community if they engage with and learn from one another. On the other hand, this will only be able to build a practice community.
Practice: A CoP is a group of people who work together to solve problems (Wenger, 1998). They create a shared repository of procedures and resources, such as experiences, stories, tools for coping with recurring difficulties, or a shared practice (Wenger, 1998). For this to work, patience and regular engagement are required (Wenger, 1998).

According to Wenger (1998), people that engage in collaborative learning in a shared domain of human effort constitute CoPs. A CoP might emerge naturally from members’ shared interests in a single domain or area, such as account management, or it can be purposefully founded to acquire new skills in a certain field, such as technology. By sharing their experiences and information, group members can learn from one another and improve personally and professionally (Wenger, 1998).

**Technological Pedagogical Content Knowledge**

In 2006, Michigan State University's Punya Mishra and Matthew J. Koehler introduced the TPACK framework. Technological Pedagogical Content Knowledge (TPACK) is a theory that describes the knowledge that pedagogues need to teach a topic well while simultaneously using technology. The TPACK framework is a technology integration framework describing three categories of knowledge pedagogues must combine for effective technological integration: technical, pedagogical, and content knowledge.

As illustrated in Figure 7, they recognized three basic forms of knowledge under this framework: Content Knowledge (CK), Pedagogical Knowledge (PK), and (TK; Mishra & Koehler, 2006). Using the TPACK framework, trainers can assess the technological gap and look at these three knowledge bases separately. The TPACK framework was expanded to emphasize the types of knowledge that exist at the intersections of three primary forms of knowledge:
Pedagogical Content Knowledge (PCK), Technological Content Knowledge (TCK), Technological Pedagogical Knowledge (TPK), and TPACK (Mishra & Koehler, 2006). Attention to the dynamic between various components of knowledge situated in distinct contexts is required for effective technology integration for teaching around specific subject matter (Mishra & Koehler, 2006).

There is content, pedagogy, technology, and linkages among and between them and the participants within learning and development facilitation and strategies. Cognitive interactions take on various shapes depending on the circumstances (Mishra & Koehler, 2006). Facilitation, learning and growth, traditional and current indigenous knowledge, and technology all have a long history, encompassing subjects as diverse as archeology, history, medicine, and physics.

The development of new technologies that allow representation has coincided with a greater emphasis on simulation's role in understanding phenomena (Mishra & Koehler, 2006). Technology has frequently resulted in significant shifts in the character of disciplines. Understanding the impact of technology on learning practices and methods is essential for developing proper educational and technological tools (Mishra & Koehler, 2006). Several technologies allow for more freedom in traversing between these representations. Learning and development programs should demonstrate how specific technology can advance the topic matter (Mishra & Koehler, 2006). Facilitators must understand which technologies are most effective for addressing subject-matter learning especially in enterprises owned and operated by sovereign nations.

Learning management systems, for example, are web-based technologies that act as a repository for learning materials, papers, files, and communication (Mishra & Koehler, 2006). As a result, TPCK necessitates a forward-thinking and innovative knowledge infrastructure that
seeks to use technology to promote learning and understanding inside a sovereign nation. Furthermore, the TPACK framework allows various study options in knowledge acquisition, professional development, and technology user competency.

**Figure 7**

*The TPACK Framework*


The TPACK framework provides perspectives on a complex phenomenon such as technology and develops a platform for analysis and development (Mishra & Koehler, 2006). It also enables educators, facilitators, professionals, and researchers to move beyond simple approaches that consider technology as an “add-on” to their work (Mishra & Koehler, 2006). Instead, the emphasis is shifted to more ecological links between content, pedagogy, and technology knowledge management.
Knowledge Management

Enterprises can use knowledge management (KM) to develop, distribute, and apply comprehension to meet their goals (Laszlo, 2017). It refers to a multidisciplinary approach to learning goals that maximize the utilization of information (University of North Carolina at Chapel Hill, 2007; Sanchez, 1996). Many large enterprises, public institutions, and nonprofits, according to Addicot et al. (2006), have resources allocated to internal KM activities, which are often part of their business strategy, information technology, or human resource management departments (Sanchez, 1996; University of North Carolina at Chapel Hill, 2017). Organizational objectives such as competitive advantage, increased job performance, innovation, organizational integration, continuous development, and the sharing of lessons learned are often the focus of knowledge management activities (Gupta & Sharma, 2004).

According to the University of North Carolina at Chapel Hill (2017), specific adaptations to these technologies, such as computer-supported cooperative work, expert systems, group decision support systems, information repositories, intranets, and knowledge bases, were introduced as technology advanced in the second half of the twentieth century to enhance further learning efforts. The relevance of knowledge management aspects of strategy, method, and assessment was recognized in early collections of case studies (Booker et al., 2008; Morey et al., 2002).

As Nonaka and Takeuchi (1995) described, the knowledge spiral requires a focus on building programs that promote the cognitive bridge between explicit and tacit information. This intersection and interaction connect environmental elements, identity, knowledge, and people on a cognitive level (Snowden, 2002). People and the cultural norms that impact their behaviors, according to Morey et al. (2002), are the most crucial resources for successful knowledge
generation, diffusion, and application, cognitive, social, and nurturing, through offering inclusion. These organizational learning practices must be evaluated, benchmarked, and rewarded to speed the learning process and foster cultural change.

According to Knoco (2014), a useful knowledge management framework provides for a system that has all the key knowledge management ideas in place (as cited in Laszlo, 2017). Components, design characteristics, interdependencies, and social and technological structures are all described in such frameworks (Knoco, 2014). A knowledge management framework must guarantee that there are no holes in the processing system and that information may easily move throughout an enterprise (Knoco, 2014, as cited in Laszlo, 2017). Heisig (2009) looked over 160 frameworks and identified four key elements in KM frameworks: (a) culture; (b) people and leadership; (c) organizational processes and structures; and (d) technical infrastructure.

According to Heisig (2009), cooperation and communication depend mostly on organizational and location-based cultural traditions (as cited in Laszlo, 2017). A useful knowledge management framework should facilitate employee learning on the values and virtues of knowledge management, as well as the importance of building and retaining knowledge infrastructure, as well as engage employees in identifying examples of excellence to deliver strategic success (Heisig, 2009, as cited in Laszlo, 2017). According to Rowley (2001), a knowledge management framework must encourage senior management to articulate realistic and consistent expectations regarding information sharing (Heisig, 2009, as cited in Laszlo, 2017).

Assume that a knowledge management framework is only operational, with no visible backing from upper management. It will have a limited impact on an enterprise's performance in that instance (Heisig, 2009, as cited in Laszlo, 2017). Rowley (2001) states that successful
knowledge management systems should establish an environment encouraging innovative and broader thinking processes. Employees are constantly encouraged to collaborate and learn together (as cited in Laszlo, 2017). According to Laszlo (2017), effective knowledge management frameworks should aid in identifying, developing, and retaining employees with important expertise. Improved interactions and strengthened networks to produce and build knowledge are among the benefits of a well-structured knowledge management framework (Laszlo, 2017).

Pawlowski and Bick (2012) state that “processes and structures differ depending on the organizational and geographic culture. It is necessary to coordinate knowledge management processes in distributed enterprises and between enterprises with different organizational and ethnic cultures” (as cited in Laszlo, 2017, para. 10). Fostering collaboration may be used to assess the efficacy of a knowledge management methodology. If an enterprise's knowledge management structure is ineffective, knowledge will not be shared, and collaboration will be limited (Laszlo, 2017).

Technological knowledge infrastructures must be developed as part of a good knowledge management architecture that enables an enterprise to access its knowledge stores. An enterprise's explicit knowledge should be collected and disseminated through these knowledge management repositories. It should also facilitate converting implicit knowledge into explicit learning (Rowley, 2001). Communities of Practice (Lave & Wenger, 1991) can serve as a knowledge management system that helps with this access to knowledge by providing an atmosphere where members feel comfortable sharing their expertise (Rowley, 2001). According to Rowley (2001), a knowledge management system will have the greatest impact if
implemented in an environment that regards information as an asset. Any knowledge management system should strive to make information sharing easy for many stakeholders.

According to Tuomi (1999), a good knowledge management framework should offer consistent language and a point of reference that allows various organizational actors to comprehend their operations as part of a wider effort to construct enterprise knowledge management efficiently. A knowledge management framework must be positioned in such a way that it is clear what value it brings to enterprises, such as (a) increased productivity in job performance, which is created by an increasingly engaged workforce; (b) enhanced innovation, which is created by sharing ideas through communities of practice; and (c) addressing issues caused by increased career autonomy, the aging workforce, and skills shortages (Laszlo, 2017).

Knowledge management frameworks may help to enhance knowledge-based partnerships and networks; they should also serve as a foundation for strategic orientations and connect directly to the enterprise's goals (Laszlo, 2017).

**Tracking of Learning Metrics**

Tracking learning metrics helps ensure long-term sustainability as knowledge acquisition leads to more successful enterprises. According to AFP Global (2019), “metrics should be reviewed regularly to see improvements and sometimes to see where they may need to be adapted or to incorporate stretch goals as efforts improve, constituents change and as business goals change” (para. 8-10). Metrics are significant because they allow enterprises to be accountable for tracking growth and augmenting value. According to their study’s results, “55% of surveyed enterprises have not implemented any diversity metrics” (AFP Global, 2019, para. 5). Of those U.S. enterprises with established metrics, “25% share the data with their board, senior management, and staff” (AFP Global, 2019, para. 5). AFP Global (2019) also found that
“keeping track of diversity metrics helps organizations assess if they are achieving the cultural and engagement goals across the various demographic segments within their organizations” (para. 9). These statistics indicate that data is often not provided as learning metrics, creating misinformation about learning benefits. It is essential to have accessible data to holistically evaluate how learning strategies can motivate positive attitudes and behaviors while creating and maintaining an inclusive workplace.

Despite its disadvantages, sovereign nations will have a promising future if many opportunities are provided as options to employees (AFP Global, 2019; Jehn & Bezrukova, 2004; Jehn et al., 2010; Vaughan, 1996; Whiteley, 2004). Medina (2017) argues that “if organizations want to create sustained diversity at the top, they need to continuously cultivate a talent pipeline of diverse high-potential candidates, both internally and externally” (para. 4). There is a call for further assessment to determine the empirical results of learning strategies within U.S. enterprises (AFP Global, 2019; Alderete, 1998; Ayoko & Härtel, 2006; Cook & Glass, 2015; Horwitz & Horwitz, 2007; Jehn & Bezrukova, 2004; Jehn et al., 2010; Williams & O’Reilly, 1998). However, the learning strategies’ inconsistency is not fully explored to its full scope and should be highlighted for future research. Scholars now have the potential to contribute further information on the benefits of learning practices inside sovereign nations as this body of research data continues to grow.

The literature on learning strategies within U.S. enterprises is evolving, yet many gaps exist. This literature review has drawn from scholarly research articles (Jehn & Bezrukova, 2004; Jehn et al., 2010; D. Jones, 1999; Milliken & Martins, 1996; Rooyackers & Verkuyten, 2012; Will et al., 2018) that provided a contemporary and historical perspective to validate why there is a need to understand the impact of learning strategies within enterprises. Though there
have been many strides to develop learning strategies implementation within enterprises, there is a need to research this topic further (Ely & Thomas, 2001; Jehn & Bezrukova, 2004; Jehn et al., 2010; D. Jones, 1999; Milliken & Martins, 1996; Rooyackers & Verkuyten, 2012).

Sovereign nations have a challenging task in accommodating the needs of internal and external environments as they operate in environments that represent multiple cultures, languages, and religions. This research demonstrates that learning strategies are a compelling interest for sovereign nations and must be acknowledged. Learning strategies must reside within sovereign nations’ enterprise structure to succeed in a global market where diversity lives and thrives (Kay & Gorman, 2012; Medina, 2017; Rosenberg, 2008; Ugboro & Obeng, 2009; Whiteley, 2004; Williams & O’Reilly, 1998). Understandably, there is no one approach to advancing learning strategies, but there must be diversification to meet the demands of diverse enterprises.

**Diversity and Inclusion**

As global socio-cultural shifts occur, there are new demands for advancing Indigenous Americans beyond diversity and inclusion constructs within sovereign nations. There is a need to bridge the social gaps that have disconnected sovereign nations from communities by establishing a new route for change. Employees can expand their skill sets to combat historical hegemonic power, prejudice, and racism in multinational enterprises by providing diversity training. The ongoing promotion of knowledge advancement and cultural acceptance within sovereign nations should be implemented. There must be a commitment to accepting and resolving continuing diversity and inclusion challenges, as many communities are dependent on actions now.
Cook and Glass (2015) contend that “despite growing attention to the effects of diversity on firm practices, relatively little scholarship has focused on the impact of racial/ethnic diversity among leaders beyond broad performance measures or organizational diversity outcomes” (p. 118). Whereas Rupert et al. (2010) found that “past research on the impact of diversity in the workplace has mainly focused on the effects of team diversity on group processes, such as conflict and information processing, on a workgroup and individual outcomes like performance, commitment, satisfaction, and turnover” (p. 25). This corroborates what researchers (Cook & Glass, 2015; Peterson, 1999) explain: much focus is on performance and retention rather than on implementing and defining diversity and learning strategies.

By developing leaders within sovereign nations, diversity and inclusion efforts will advance, establishing a foundation set by examples and praxis. There is no “fix-it-all” approach to implementing diversity and inclusion initiatives. By encompassing advanced levels of cognition through diversity training that focuses on education and personal and professional development, Indigenous Americans will be able to prepare global sovereign nations to be more inclusive and accept multiculturalism.

Diversity Defined

Much focus has been on advancing enterprises and their business functions (e.g., job performance = capital gains) but not on diversity outcomes. However, Indigenous Americans struggle due to the lack of rectifying diversity and inclusion constructs established by the majority. Alderete (1998) explains that “the United States has witnessed unprecedented changes in its racial makeup” (p. 366). For example, according to the Bureau of Labor Statistics, there are “28.4 million foreign-born persons in the U.S. labor force, comprising 17.4 percent of the total” (U.S. Bureau of Labor Statistics, 2020, para. 3). These persons include:
Foreign-born men were more likely to participate in the labor force than [Indigenous]-born men (78.0 percent compared with 67.4 percent). In comparison, foreign-born women were less likely to participate in the labor force than [Indigenous]-born women (54.8 percent compared with 57.9 percent). (U.S. Bureau of Labor Statistics, 2020, para. 5)

With such ongoing changes in global demographics, Indigenous Americans can leverage their influence and help sovereign nations understand the potential of diversity. According to Dictionary.com dictionary, diversity is defined as “the inclusion of different types of people (such as people of different races or cultures) in a group or organization” (Dictionary.com, n.d., para. 2). As a governmental construct, diversity has been overlooked even as ongoing socio-cultural shifts within nations occur. In the wake of such significant political and social change worldwide within the past decades, sovereign nations must continue taking steps to increase their diversity efforts.

Throughout United States history, there has been a great indifference amongst Indigenous Americans. Since abolishing slavery, sociocultural areas have been segregated into private and public spaces. Many minority communities, including Indigenous Americans, were negatively impacted as socio-cultural divides created a new landscape that further ostracized a power distance between the minority and the majority. To combat this power distance within sovereign nations, other governmental nations, and minority communities, “the U.S. Equal Employment Opportunity Commission (EEOC) was established under Title VII of the Civil Rights Act of 1964” (EEOC, n.d.). This federal law has enacted a commission to protect employees against shows that emphasize discrimination based on specified characteristics: color, national origin, race, religion, and sex (EEOC, n.d.). The EEOC aimed at reconciling the dynamic of oppressing
diversity and inclusion of minorities within majority spaces. As enterprises had federal requirements to employ people of color, diversity was implemented but limitations. Consequently, the established workforce within enterprises does not reflect the potential for diversity and inclusion. Though there is a general awareness of diversity in the workplace, some research investigates the positive impact minorities can have in sovereign nations.

Jehn et al. (2010) explain that “organizations are becoming increasingly aware of the impact of diversity in the workplace and the need to manage this diversity to sustain their competitive advantage” (p. 25). According to Cook and Glass (2015), multinational enterprises have encountered a prodigious demographic shift and have increased diversity initiatives to align with industry trends. Whiteley (2004) states that “following a considerable period spent in the margins of the business and corporate world, diversity and inclusion are beginning to cement its rightful place in the mainstream business agenda” (p. 162). However, Schneider et al. (2012) state that “although there is growing acknowledgment of the business case for diversity, efforts to recognize diversity as a strategic issue and to implement diversity initiatives have often been thwarted” (p. 125). As such, Whiteley (2004) states that many enterprises recognize a need to increase their employees’ knowledge of diversity. Whiteley (2004) explains that “any organizations have made significant progress in developing diversity strategies and have put in place robust policies and procedures to ensure fairness and transparency” (p. 162).

Enterprises must provide an evolving awareness that will access the consciousness of their employees and leaders, so there are self-reflections and alignments with the importance of diversity and inclusion constructs. Whiteley (2004) suggests that various research has shown that the enterprises that conduct leaderful modeling demonstrate diversity and inclusion are the same enterprises that successfully integrate variety into mainstream businesses. To affect this needed
sustained organizational behavioral change, sovereign nations must require more than one-day training sessions on diversity and inclusion. This process will require ongoing coaching, feedback, and support, to change the implemented diversity initiatives. Many researchers have also sought to analyze the organizational outcomes and the impact of diversity, not on advancing minorities into global leaders. According to Cook and Glass (2015), “most scholarship to date has focused on the effect of diversity on broad performance measures and diversity outcomes” (p. 117).

Ayoko and Härtel (2006) state that “most studies on diversity have concentrated on the impact of diversity on workgroup outcomes [yet] diversity appears to be a double-edged sword, increasing the opportunity for creativity while at the same time increasing the likelihood of dissatisfaction and failure to identify with one’s workgroup” (Ayoko & Härtel, 2006, p. 347). This scholarship shows how global leaders and scholars focused on improving the enterprise, not their employees (i.e., large populations of minorities). Cook and Glass (2015) state that “despite growing attention to the effects of diversity on firm practices, relatively little scholarship has focused on the impact of racial/ethnic diversity among leaders beyond broad performance measures or organizational diversity outcomes” (p. 118).

Suppose heterogeneous groups consist of different ages, cultures, ethnicities, experiences, genders, and religions. In this illustration, multiple perspectives could be drawn upon to respond to historical and new problems that arise as global socio-cultural shifts occur within enterprises. Stewart et al. (2008) states that “the expression and consideration of diverse perspectives can enhance group and enterprise creativity, decision making, problem-solving, and strategy generation, rendering performance advantages relative to groups and organizations composed of relatively homogeneous perspectives” (p. 374). Rupert et al. (2010) investigated
cultural minorities and their majorities in their study; The authors examined how many contextual factors (e.g., enterprise leadership styles and high pressure to conform to management) can ultimately affect minority and majority employees (Rupert et al., 2010). The authors found that “past research on the impact of diversity in the workplace has mainly focused on the effects of team diversity on group processes, such as conflict and information processing, on workgroup and individual outcomes like performance, commitment, satisfaction, and turnover” (Rupert et al., 2010, p. 25). This focus has positioned Indigenous Americans as inferior and has created a hegemonic power distance that has plagued this population throughout the past decades. A call for action is required so that diversity efforts can lay the groundwork for sovereign nations.

**Inclusion Defined**

While there is no one particular professional field or one singular enterprise dealing with distinct diversity and inclusion issues, there is a lack of representation of Indigenous American leaders that can influence inclusion. According to Merriam-Webster’s dictionary, inclusion is defined as “the act or practice of including and accommodating people who have historically been excluded (as because of their race, gender, sexuality, or ability)” (Merriam-Webster, n.d.-b., para. 4). Traditional cultural values and recognized developmental functions within firms were explored by Kay and Gorman (2012). Kay & Gorman (2012) states that the “formal processes and cultural beliefs meant to facilitate employee growth and development do not “level the playing field” for minorities” (p. 91). The authors also stated that “racial and ethnic minorities are scarce among managers and executives and within organizations in the United States” (Kay & Gorman, 2012, p. 92).
Stewart et al. (2008) explain that while enterprises espouse inclusion, they may practice exclusion, further delaying diversity efforts. For example, while working with the Director of Human Capital at Coca-Cola, the researcher was tasked with one of the organizational initiatives, which was to establish regional diversity and inclusion business resource groups (BRGs) within the Greater Los Angeles area. These groups comprised Asian American BRG, African American BRG, Hispanic Leadership BRG, Military BRG, and Women’s LINC BRG. Initially, the thought was to provide uniform inclusion access to diverse leaders within the regional branches of Coca-Cola. The intention was to help begin conversations on advancing diversity and inclusion to meet former CEO Mutar Kent’s ‘2020 Vision’ expectations. Members would participate in cross-business, cross-cultural, and cross-ethnic ideas, and relationship development. Within several months of the BRGs’ release to the general employee population, the local chapters segregated themselves.

Each group’s membership coordinator only allowed their ethnicity, gender, identity, and status into the groups. This created additional internal and external segregation of the BRGs and further impeded inclusion efforts. It was revealed that many BRGs only felt comfortable working with their selected group members. One of the main issues was that each BRG had established separate norms for their group’s conduct within their diversity and inclusion initiatives. Many groups would only invite their selected group members to off-site events, which underrepresented Coca-Cola’s umbrella commitment to diversity and inclusion. This example is a problem that reaches far beyond enterprises and society. The benefit of diversity and inclusion within global enterprises depends primarily on collective power, as defined and reinforced by its leaders. As such, underrepresented minorities will continue to compete and fight against the majority, segregate themselves, or succumb to the majority by conforming to the norms.
established. Eustachewich (2021) found that in another example where “Coca-Cola employees were urged to be “less white” as part of the company’s alleged diversity training” (para. 1).

Within this DEI training, a slide read, “In the U.S. and other Western nations, white people are socialized to feel that they are inherently superior because they are white” (Eustachewich 2021, para. 2). Eustachewich (2021) also found that another slide states to “try to be less white” with tips including “be less oppressive,” “listen,” “believe” and “break with white solidarity” (para. 3).

Unfortunately, these examples are constant. Since long before the 1800s, society has pinned minorities as workhorses for capital gain. By inviting Indigenous Americans within global groups through collective wisdom, a social psychology principle, cultural and innovative methodologies can be interwoven into the current praxis in business, economics, and politics to further inclusion demands (Pryor et al., 2019). Ely and Thomas (2001) state that most scholars have speculated that what circumstances are created by inclusion will lead to positive and negative outcomes. Ely and Thomas (2001) explain that “as a result, consultants and managers interested in diversity have had to rely largely on some combination of common sense and good faith for the rationales they advance about why and how companies should address the issue” (p. 229).

By combating these global disparities of inclusion, new minority influence will be created. This influence will promote change, innovation, and creativity by enhancing collective wisdom that emphasizes inclusion’s importance within sovereign nations. Alire (2001) states that “leaders of color are instrumental in recognizing the value of diversity... These leaders can create an environment where no one is disadvantaged (or preferred) because of race, ethnicity, creed, gender, sexual orientation, et cetera” (p. 101).
Additionally, Alire (2001) states that minority leaders have natural awareness and heightened sensitivity that will allow them to determine what is needed for inclusion. Rupert et al. (2010) state that “being a minority can be of strategic value and therefore a position to foster. The theorizing and much of the research on minority influence is focused on the persuasive effects of minorities on individuals” (p. 45). As such, minority influence can gain the needed momentum to overcome social diversity that has been disparaging generations for centuries and be the catalyst for inclusion moving forward.

Though some research indicates that being a minority can cause conflict, other studies identify how minorities can create the shift due to their acknowledgment of inclusion. Rooyackers and Verkuyten (2012) found that their “analysis suggests that being a minority can be of strategic political value and, therefore, a position to foster” (p. 130). The author's further state that “minority influence is therefore about overcoming differences as much as it is about sustaining conflict and stressing differences...It follows that the social implications of a minority status need not be negative” (Rooyackers & Verkuyten, 2012, p. 45). As a result, minority power is not tied to the typical 'win or lose' scenario. Suppose minorities are allowed to build a shared unity that does not compromise their cultural identities. In that case, their efforts may result in radical transformation, with the ultimate goal of inclusion throughout multiculturalism

**Multiculturalism**

The changing demographics of Indigenous American communities can present an enormous challenge for global change. Multiculturalism must be acknowledged and accommodated within enterprises to succeed in a worldwide market where cultural diversity lives and thrives. According to Merriam-Webster’s dictionary, multiculturalism is defined as the “cultural pluralism or diversity (as within a society, an organization, or an educational
institution)” (n.d.-c, para. 1). Understandably, there is no one approach to advancing minorities. It is challenging to accommodate international enterprises that now represent every culture, language, and religion. To lay a foundation for global growth, we must understand non-Indigenous communities. According to the U.S. Bureau of Labor Statistics Labor (2020):

Foreign-born workers were more likely than [Indigenous]-born workers to be employed in service occupations; natural resources, construction, and maintenance occupations; and production, transportation, and material moving occupations. Foreign-born workers were less likely than [Indigenous]-born workers to be employed in management, professional, and related occupations and in sales and office occupations. (para. 6)

As global leaders, there must be an intentional focus on those seeking change first, develop them, and showcase them as a benchmark for those opposed to change. As new development occurs, communities align and become recognized. Global leaders can use their networks and resources to identify gaps to improve while fostering change within said communities. Rosenberg (2008) emphasizes that there is an absence of cultural competency; The author explains that there is little diversity in global leadership ranks as C-suite positions are saturated with non-Hispanic whites (Rosenberg, 2008). As such, this lack of cultural diversity amongst global leaders has widened the gap in the current and historic social chasm of ethnic and racial imbalance as witnessed through colonial and contemporary American history.

Paradoxically, there has been a shortage of minority leaders within our current organizational landscape. Kay and Gorman (2012) state that “explanations of minority underrepresentation among organizational managers have focused primarily on either employee deficits in human and social capital or employer discrimination” (p. 91). The authors explain that
“to date, research has paid little attention to the role of developmental practices and related cultural values within organizations” (Kay & Gorman, 2012, p. 91).

Minorities have a promising future if many leadership opportunities are available globally. Reconciling this paradox is one of the major issues facing Indigenous American communities today. Kay and Gorman (2012) state that studies reveal that racial and ethnic minorities face lower chances of promotion. Minorities attain lower organizational rank or authority do their white counterparts (Kay & Gorman, 2012). One of the problems is peeling away the layers of prejudice and structural racism, as though it is a social onion. For example, we are exposed to compounded matter in peeling this social onion layer after layer. Some layers cause individuals to feel discomfort, exposing other layers. Even as layers are revealed with effort, the core is often never identified due to physical anguish. If the core is exposed and identified, it is thrown away, beginning with a new social onion.

Jehn et al. (2010) found that many contextual factors contributed to pressures to conform and leadership styles with enterprises. The author’s study found that cultural minorities “felt more committed to the enterprise than majority members, thereby challenging the existing theoretical view that cultural minorities will feel less committed” (Jehn et al., 2010, p. 25). This finding suggests that minorities are loyal. If their loyalty could be transacted into compounding social capital, the investment would provide sizable benefits to both minorities and the enterprise over time. Their findings indicate the need for global leaders and researchers to shift their focus to advancing a commitment of minorities. Jehn et al., (2010) state that all employees must be culturally socialized and integrate processes within enterprises globally.

It is understood that this contradiction will not resolve itself, nor will there be adequate advancement of minorities, until the government, world leaders, enterprises, society, and those
devoted to multiculturalism growth take steps to acknowledge the raw reality. When adjusting to mainstream corporate culture, Indigenous Americans struggle to identify and accept the working norm, even if it alienates them. Because Indigenous Americans have been dealt a skewed playing field, it should be no surprise that they continue to lag behind the mainstream population regarding employment, income, and living conditions. Multiculturalism acts as a link between an enterprise and the familiar surroundings of minorities, bridging the cultural difference. However, Indigenous Americans’ success will not materialize without a strong organizational commitment to ensuring that relevant resources and structures are in place.

Cultural diversity is one of the many bedrocks attributes that the current workforce should integrate to understand the benefits of multiculturalism. However, diversity needs to be adequately reflected in organizational behavior theories. This shortcoming means that university management and organizational behavior courses cannot adequately prepare minority managers and that enterprises lack appropriate structures for training and supporting these same managers once they enter the workforce. This illustrates that managing homogeneous groups can be convoluted, especially when there are poor cohesion and social integration challenges in global leadership roles. In this context, enterprises must not compromise minorities’ identity to assimilate them properly into the organizational fold because it is more comfortable and controllable. Cox and Blake (1991) state that increasing diversity will not only capture unique talents but will also yield benefits in innovation and creativity that arise as a result of bringing divergent perspectives to problem-solving from different backgrounds and life experiences.

Diversity Strategies Defined Within Enterprises

Diversity is a multifaceted phenomenon that is defined in a variety of ways. According to Merriam-Webster's dictionary, diversity is defined as “the inclusion of different types of people
(such as people of different races or cultures) in a group or organization” (Merriam-Webster, n.d.-a, para. 2). In comparison, Dictionary.com defines diversity as “the inclusion of individuals representing more than one national origin, color, religion, socioeconomic stratum, sexual orientation, etc.” (Merriam-Webster, n.d.-a, para. 3).

According to Merriam-Webster's dictionary, strategy is defined as “a plan, method, or series of maneuvers or stratagems for obtaining a specific goal or result” (Merriam-Webster, n.d.-e, para. 4). In comparison, Dictionary.com defines strategy as “the inclusion of individuals representing more than one national origin, color, religion, socioeconomic stratum, sexual orientation, etc.” (n.d., para. 4, e.). Strategy is a framework composed of many elements that guide enterprises to meet their goals and objectives.

When combined, diversity strategies (AFP Global, 2019; Alderete, 1998; Alire, 2001; Jehn et al., 2010; Kay & Gorman, 2012; Medina, 2017; Peterson, 1999; Rosenberg, 2008) are multifaceted frameworks that help to control the link between organizational diversity and performance. Peterson (1999) explains that to improve enterprise conditions, an ongoing commitment to diversity strategies must be identified by leadership, and diversity these strategies must be implemented. This commitment also requires consistent data collection that illustrates how diversity strategies can create improvements (Peterson, 1999; Ugboro & Obeng, 2009; Williams & O'Reilly, 1998). D. Jones (1999) found that enterprises can define and manage diversity strategies effectively by: “(a) hiring and keeping the best of the new labor pool, (b) gaining access to greater innovation, (c) achieving better performance among female and minority workers, and (d) gaining the ability to make the most of ethnic or international markets” (p. 6). The 2019 Diversity Practices Report included a counter-narrative of diversity success
(AFP Global, 2019). The report presented data for leadership teams to integrate strategies within their prospective diversity goals (AFP Global, 2019).

A qualitative study on diversity practices within enterprises found that 52% of participants “reported that their organization has a formal diversity statement” (AFP Global, 2019, para 4). Of the U.S. enterprises surveyed, AFP Global (2019) reports that “69% lacked a true diversity strategy” (para. 1). AFP Global (2019) found that “less than 31% of the U.S. organizations surveyed have a formal diversity strategy, and 42% of respondents cited “realizing racial and ethnic diversity” as their greatest diversity challenge” (para. 6). These statistics illustrate how diversity is not uniquely defined yet, and its structure is lacking within enterprises. Diversity strategies are not formulaic, but their approach can be leveraged to produce innovative solutions from various perspectives.

**Benefits of Diversity Strategies Within Enterprises**

Fortunately, there are many benefits to implementing diversity strategies within enterprises. Diverse viewpoints can foster enterprise-wide team creativity, provide jobs for minorities, improve decision-making, uncover bias, and provide chances for cross-training personnel (Kay & Gorman, 2012; Medina, 2017; Stewart et al., 2008). The benefits of diversity strategies can help enterprises elevate to innovative levels because they help identify novel ways to incorporate diversity as a central part of their mission and vision. The benefits of diversity strategies serve as a bridge that connects the cultural divide and separates an enterprise and the familiar environment (AFP Global, 2019; Jehn et al., 2010; Kay & Gorman, 2012; Medina, 2017; Ugboro & Obeng, 2009; Whiteley, 2004).

However, diversity strategy success will only materialize with strong enterprise commitment by ensuring that relevant resources and structures are in place (Kay & Gorman,
Enterprise leaders can use their networks and resources to identify gaps and foster effective diversity strategies by advancing resistance (Will et al., 2018). Diversity rationales do not differ substantially from resistances. The challenge of diversity strategies involves an enterprise’s ability to provide factual-based evidence to support the affirmations made regarding an enterprise’s interest in diversity strategies (Sun & Wang, 2017; Will et al., 2018).

Constructing and sustaining a diverse workforce within enterprises necessitates diversity training to inform its personnel to raise awareness of different belief systems, cultures, perspectives, and races and to uncover biases that will impact the enterprise (Jehn et al., 2010; Kay & Gorman, 2012; Medina, 2017; Rosenberg, 2008). Though the benefits of diversity strategies may outweigh other interpretations and themes, evaluating and exploring the various disadvantages is essential.

**Disadvantages of Diversity Strategies Within Enterprises**

Some disadvantages in adapting to a mainstream workplace culture position in enterprises occur because of overlooking diversity strategies. Scholarly research (Horwitz & Horwitz, 2007; Jehn & Bezrukova, 2004; Joshi & Roh, 2009; Milliken & Martins, 1996; Ugboro & Obeng, 2009; Williams & O'Reilly, 1998) states that diversity in the workplace is an enigma that can provide disadvantages. Potential disadvantages of diversity strategies are that they can create too many opinions, can lessen the truth that exists, can create hostility amongst teams, and can create communication problems (Medina, 2017; Peterson, 1999; Rupert et al., 2010; Will et al., 2018; Williams & O'Reilly, 1998).

Other disadvantages of diversity strategies include that they can provide challenges that limit some cultures within departments from being heard, it does not combat existing cultural
stereotypes within the enterprise, and it is often left to one individual (i.e., Chief Diversity Officer) to implement (Jehn & Bezrukova, 2004; Jehn et al., 2010; Peterson, 1999; Rupert et al., 2010; Will et al., 2018; Williams & O'Reilly, 1998).

If the sovereign nation wants to succeed in this century of social justice and responsibility, it must implement diversity and learning strategies and be intentional in understanding culture, ethnicity, and race (AFP Global, 2019; Kay & Gorman, 2012; Jehn & Bezrukova, 2004; Jehn et al., 2010; Peterson, 1999). It appears logical that business leaders should use the diversity strategy rationale to define and substantiate the demands their policies are supposed to meet when implementing such plans (Medina, 2017; Peterson, 1999). To meet this requirement, sovereign nations should broaden assertions and explain the need to understand their enterprise’s diversity strategies.

**Implementing Diversity Strategies Within Enterprises**

Like many organizational challenges, implementing effective diversity strategies are multifaceted and varies within each enterprise (AFP Global, 2019; Kay & Gorman, 2012; Medina, 2017; Whiteley, 2004; Will et al., 2018). By not establishing effective diversity strategies, enterprises limit employee and organizational progress. Research on workforce diversity (Jehn & Bezrukova, 2004; Jehn et al., 2010; D. Jones, 1999; Milliken & Martins, 1996; Rooyackers & Verkuyten, 2012) requires that if enterprises to move toward holistic diversity acceptance and implementation, leadership should establish new policies that place diversity strategies a structure. Enterprises must foster diversity “beyond the organization, from staff to vendors and suppliers, and the community organizations they partner with and support” (Medina, 2017, para. 8). This is extremely important as diversity should be structured with an all-encompassing foundation that promotes diversity as a framework. Research studies (Cook &
Glass, 2015; Kay & Gorman, 2012; Rosenberg, 2008; Whiteley, 2004; Williams & O’Reilly, 1998) also provided a subtheme of diversity training relevant to building knowledge infrastructure.

Diversity Training

Goals should include such apparent steps as providing diversity training to employees to understand diversity strategies at various levels and their intended business impact. Diversity training connects to diversity and learning strategies to further secure knowledge infrastructure (AFP Global, 2019; Alderete, 1998; Alire, 2001; Kay & Gorman, 2012; Whiteley, 2004). AFP Global (2019) discovered that 41% of those polled said their companies had offered diversity training to their top executives. Of those participants, “43% reported that diversity training was provided to staff members” (AFP Global, 2019, para. 6). Employees adapting to mainstream workplace culture is a crucial illustration that there are opportunities to understand the benefits of diversity training fully. Additionally, AFP Global (2019) found that “failure to demonstrate commitment to diversity erodes a mission’s ability to attract and retain the best talent” (para. 6).

Moreover, only “22% of organizations have a staff person who is solely responsible for the organization’s diversity efforts, and 28% of survey respondents have retained an external diversity coach or consultant” (AFP Global, 2019, para. 6). To institute diversity training effectively, enterprises should develop a network of leaders to help become race-literate. AFP Global (2019) suggested that diversity training helps employees become race-literate, which “is essential to creating equity, inclusion, and belonging in an organization” (para. 5).

Diversity training also helps employees understand how they can navigate their enterprise with the support of internal networks established by leaders. Medina (2017) informed that “if an employee cannot see a clear career path within an organization or easily identify opportunities to
advance, he or she is less likely to hang in for the long haul” (para. 9). By providing diversity training programs, enterprises can help their employees view their enterprise as an environment to develop (Jehn et al., 2010; Medina, 2017; Rupert et al., 2010). In their study (AFP Global, 2019), “51% of the organizations surveyed offer general diversity training, while 31% offer no diversity training” (para. 6). The statistic illustrates an example of what researchers (Cook & Glass, 2015; Jehn et al., 2010; Whiteley, 2004) identify as a limitation of U.S. enterprises’ diversity strategies. Diversity training must not be general but purposeful and strategic to drive an understanding of racial literacy. Ultimately, “diversity training raises awareness of different races, cultures, belief systems, and perspectives. Increased awareness strengthens cultural competency, uncovers unconscious bias, and cultivates sensitivity in the workplace” (AFP Global, 2019, para. 6).

Governing entities should do all they can to create an organizational climate conducive to accepting diversity strategies. There must be an ongoing commitment from leadership channels to the employees (AFP Global, 2019; Jehn et al., 2010; Rupert et al., 2010; Whiteley, 2004). By developing such training, U.S. enterprises can reestablish the structure needed to reestablish the proper foundation to advance and promote diversity strategies that are set by examples and praxis (Jehn et al., 2010; Williams & O’Reilly, 1998). Stewart et al. (2008) state that “the expression and consideration of diverse perspectives can enhance group and organization creativity, decision making, problem-solving, and strategy generation, rendering performance advantages relative to groups and enterprises composed of relatively homogeneous perspectives” (p. 374). The authors found that “past research on the impact of diversity in the workplace has mainly focused on the effects of team diversity on group processes, such as conflict and information processing, on workgroup and individual outcomes like performance, commitment,
satisfaction, and turnover” (Rupert et al., 2010, p. 25). Leaders within enterprises must be the role models that set the expectations for ongoing diversity strategy implementation by driving awareness. Metrics must be tracked to evaluate how diversity strategies should be implemented to realize the impact of diversity training.

**Future of Diversity and Inclusion**

Like many universal problems globally, achieving diversity and inclusion may seem simple. As global leaders, we must dig deeper to fix these webs of socio-cultural complexities that have limited employee and organizational progress. Change begins with hope, but it must continue to be fueled by action. Nevertheless, as this referenced literature review in previous sections suggests, if sovereign nations are to move toward holistic diversity and inclusion acceptance and integration, some steps must be taken at once to advance minorities beyond the established constructs within their enterprises.

1. Indigenous Americans must view their advancement as not a singular career option but a plan to exercise generational change as a social option. Goals should include such apparent steps as obtaining a college education, allocating various lived experiences, personal and professional development, and seeking opportunities to work in global multicultural enterprises at multiple levels. Also, Indigenous Americans should have mentors to help them advance in their careers. A case study by Vigil (2020) reveals the benefits of mentorships and why there is a need to mentor minorities within enterprises. Valverde (1998) offers three linking leadership techniques for advancing minority leaders from these socially marginalized positions. One of the ways this can be achieved, as suggested by Winston (2013), is by
“mentoring (the marginalized leaders as proteges), networking, and ad hoc leadership development that includes partnerships and collaborations” (p. 111).

2. Becoming a global leader must appeal to minorities just as it is to people of Caucasian descent. Governing entities should do all they can to create an institutional climate conducive to diversity and inclusion. Leadership in our government and throughout research, academic institutions, and industry must consider the significant minority groups (Alderete, 1998).

3. Diversity and inclusion are two words that are becoming familiar within enterprises. However, many minorities are left without direction when a crisis arises and are often overlooked when failing to address such a crisis. Suppose a greater degree of diversity and inclusion will be achieved at leadership levels shortly. In that case, enterprises must look at sources other than one specific pipeline of candidates. Despite the existing problems, the Indigenous American communities’ benign neglect harms their education and access to professional training programs (Alderete, 1998).

Kay and Gorman (2012) stated that “racial minorities are disadvantaged by a lack of opportunity to take on significant responsibility early in their careers” (p. 97). Minorities can view the differences between white and minority leadership styles (Alire, 2001). Thomas and Gabarro (1999) state that because minorities “are asked to prove their competence repeatedly before being trusted with challenging tasks, they have fewer opportunities to gain visibility and take longer to advance than their white counterparts” (p. 94). As minority leaders rise, there must be a level of respect, as they are worthy, have existed through unprecedented times, and work within a spectrum of multiculturalism.
Reframing An Enterprise

For knowledge infrastructure to be entrenched inside a sovereign nation, prejudices must be avoided, and the value of diversity, inclusion, learning and development, and multiculturalism must be emphasized in the face of business complexity. Bolman and Deal (2017) wrote, “significance is built using several expressive and symbolic forms: rituals, rites, storytelling, and music. Without a rich symbolic life, an enterprise becomes hollow and barren. The allure of extraordinary occasions is essential for instilling meaning in communal life” (Bolman & Deal, 2017, p. 34). Lessening the likelihood of oversimplifying difficulties by looking at the enterprise's success through historical events through a human resource, political, structural, and symbolic lens. According to Bolman and Deal (2017), reframing encourages individual and organizational growth.

Furthermore, reframing expands choice by allowing people to pick from various known choices. Reframing through structural, human resource, political, and symbolic lenses liberate managers by offering four distinct techniques for diagnosing and characterizing problems, each having consequences for leadership and successful action. Reframing enterprises is founded on the concept that individual and organizational performance are intertwined. The individual and cultural distinctions that connect and explore variety by creating more complicated thinking and managing uncertainty and choice by understanding Bolman and Deal's (2017) Four-Frame Model are embedded with this multi-perspective emphasis.

Bolman and Deal’s Four-Frame Model

In 1984, Lee Bolman and Terrence Deal presented their concept for influencing and achieving organizational change. Bolman and Deal (2017) extend the notion by advising leaders to approach business challenges from four distinct viewpoints, nicknamed “Frames.” The
‘Frame’ details the structural, human resource, political, and symbolic advantages of diversity training. The type of business, the individuals who are changing, and the degree of change being implemented all play a role in selecting which frames to utilize in a specific circumstance.

Most businesses have a hierarchical structure in which employees are assigned leadership positions. Leaders and managers possess diverse talents, qualities, leadership styles, and interpersonal abilities. To be a successful manager of employees with varied personality types, you must be able to discern different points of view. On the other hand, many supervisory roles are either unaware or incapable of reframing their perspective.

Bolman and Deal (2017) offered four alternative views or frames that may be used to analyze enterprises, leaders, and events in their book Reframing Organizations: Artistry, Choice, and Leadership. Each frame presents a unique perspective on the issue, highlighting various facets of the situation. To get a comprehensive image of someone or anything, you can look at them through one or more lenses. Because many people preferentially or primarily use one or two frames, intentionally reframing in other perspectives can help problem-solving.

The Structural Frame

The Structural Frame is the framework that holds everything together. The Structural Frame is task-oriented and focuses on 'how' the change is implemented. This frame focuses on establishing measurements and deadlines, developing processes and procedures, defining tasks, responsibilities, reporting lines, and strategy, and setting quantifiable objectives (Bolman & Deal, 2017). This framework is ideal for enterprises that deal with logic and analysis. The emphasis is on data, facts, and rationality, and roles and goals are often well-defined. The enterprise can be compared to a machine requiring precise motions (Bolman & Deal, 2017). Direct, focused, and systematic leadership will be required of business leaders.
**The Human Resource Frame**

In the Human Resource Framework, individual requirements are given more weight. The framework emphasizes providing employees with the autonomy and independence they need to perform their jobs successfully while meeting their needs for human contact, personal growth, and job happiness (Bolman & Deal, 2017). This frame emphasizes the individual, their needs, and their contribution to the enterprise. Employees must be given the authority and opportunity to do their jobs properly. Coaching, inspiration, advice, and support are all required to develop the position and fit (Bolman & Deal, 2017). Organizational goals frequently include employee empowerment and work satisfaction.

**The Political Frame**

The Political Frame covers the issue of people and interest groups having sometimes competing (sometimes concealed) agendas when money is tight and tough decisions must be made (Bolman & Deal, 2017). The need to settle disputes between people or various interest groups is emphasized in this context (Bolman & Deal, 2017). To assist the leader's efforts, a coalition-building, conflict resolution, and power-base development activities in shown in this frame (Bolman & Deal, 2017). This perspective shows that a corporation's hallmarks are allies, deal-making, authority, and scarcity. Leaders need to be advocates, networkers, and negotiators, among other things. While understanding that not all demands can be met, the objective is to get the most out of the assets available to the unit, enterprise, or workforce.

**The Symbolic Frame**

The Symbolic Frame responds to people's desires for meaning and purpose in their job. The framework will motivate employees since it makes the enterprise's vision feel contemporary and distinct (Bolman & Deal, 2017). The framework also includes creating an exciting vision
and celebrating good achievements through workplace celebrations (Bolman & Deal, 2017; Mannix, et al., 2019). This frame is often described as theatrical since it focuses on aligning human aspirations with business aims to provide a sense of purpose in one’s job. As illustrated in Table 1, the four frames are guidance that can help corporate leaders diversify difficulties, evaluate a complex scenario, and determine solutions when establishing knowledge infrastructure.

**Table 1**

*Four Frames*

<table>
<thead>
<tr>
<th>Frame</th>
<th>Keywords</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural Frame</td>
<td>Goals, tasks, technologies, rationalities, environments, rules, roles,</td>
</tr>
<tr>
<td></td>
<td>linkages, differentiations, and integrations.</td>
</tr>
<tr>
<td>Human Resources Frame</td>
<td>Needs, skills, feelings, motivations, satisfactions, norms,</td>
</tr>
<tr>
<td></td>
<td>interpersonal interactions, and fits.</td>
</tr>
<tr>
<td>Political Frame</td>
<td>Powers, conflicts, coalitions, scarcities, enduring differences, politics,</td>
</tr>
<tr>
<td></td>
<td>bargainings, negotiations.</td>
</tr>
<tr>
<td>Symbolic Frame</td>
<td>Symbols, meanings, beliefs, faiths, cultures, ceremonies, rituals, myths,</td>
</tr>
<tr>
<td></td>
<td>stories, and plays.</td>
</tr>
</tbody>
</table>

*Note.* Adapted From *Four Frames for Reframing Organizations* by Bolman and Deal (2017).
Reframing enterprises via these lenses reveals the underlying causes of an issue, potential solutions, and ways for achieving the desired result. Rarely does a single point of view reveal the complete picture. Businesses and people are intricate entities that require careful thought when examining, inspiring, or initiating change. Using Bolman and Deal's (2017) organizational theory, enterprises will be able to obtain clarity on the job at hand and create a roadmap for the most efficient and suitable approaches for success.

**Minority Leadership Influence**

The changing demographics of global communities present an enormous challenge as they try to determine how to redesign the delivery and implementation of diversity strategies. Rosenberg (2008) emphasizes an absence of cultural competency within enterprises, precisely diversity challenges in leadership. There is a lack of diversity in global leadership ranks as C-suite positions are saturated with non-Hispanic whites (Jehn et al., 2010; Kay & Gorman, 2012; Medina, 2017; Rosenberg, 2008). Medina (2017) found in her study:

> that while 42 percent of the organizations we surveyed are led by female executive directors, 87 percent of all executive directors or presidents were white, and that there was only minimal representation of African Americans (6 percent), Asian Americans (3 percent), and Hispanics (4 percent) in those positions. (para. 2)

There has been a lack of minority leaders to drive and implement diversity strategies within the current U.S. organizational landscape. Kay and Gorman (2012) argue that existing gaps are found with the representation of minorities in leadership roles that have affected employee deficits in both human and social capital, leading to widespread employee discrimination and the lack of implementation of diversity strategies. Additionally, there is little attention to the role and developmental parties related to cultural values, diversity, and learning strategies (Whiteley,
Rooyackers and Verkuyten (2012) found that their “analysis suggests that being a minority can be of strategic political value and, therefore, a position to foster” (p. 130). The authors further posit that “minority influence is therefore about overcoming differences as much as it is about sustaining conflict and stressing differences...It follows that the social implications of a minority status need not be negative” (Rooyackers & Verkuyten, 2012, p. 45).

Enterprises must provide the roles and tools to establish the importance of their diversity and learning strategies. Whiteley (2004) contends that various research has shown that the enterprises that conduct leadership modeling demonstrate and integrate diversity strategies into their mainstream businesses. This process will require ongoing coaching, feedback, and support, to change the implemented diversity and learning strategies (Ugboro & Obeng, 2009; Williams & O’Reilly, 1998). Many researchers have also sought to analyze the impact of diversity on enterprise outcomes (i.e., performance measures), not on advancing diversity strategies.

According to Cook and Glass (2015), “most scholarship to date has focused on the effect of diversity on broad performance measures and/or on diversity outcomes” (p. 117). By combating these diversity challenges, leadership can help develop an influence that can create buy-in. This type of influence will promote change, innovation, and creativity by enhancing collective acceptance that draws attention to advancing diversity strategies (Jehn & Bezrukova, 2004; Jehn et al., 2010; Medina, 2017; Rosenberg, 2008; Rooyackers & Verkuyten, 2012; Will et al., 2018).

This scholarship documents the value of diversity in enterprises. It can inform and enhance the argument for diversity by clarifying the debates surrounding the disadvantages of diversity strategies. This will allow policies to be designed to create and maintain diverse
work environments. Alire (2001) states that “leaders of color are instrumental in recognizing the value of diversity... These leaders can create an environment where no one is disadvantaged (or preferred) because of race, ethnicity, creed, gender, sexual orientation, et cetera” (p. 101). Furthermore, according to Alire (2001), minority leaders have a natural knowledge and heightened sensitivity that will enable them to understand what is required for diversity implementation.

Rupert et al. (2010) affirm that “being a minority can be of strategic value and, therefore, a position to foster” (p. 45). As such, minority influence can gain the needed momentum to overcome the challenges experienced when implementing diversity strategies (Rosenberg, 2008; Rooyackers & Verkuyten, 2012; Whiteley, 2004). If enterprises provide diversity training opportunities, there must be a minority leadership influence to construct a shared unity through collaboration. These efforts may invoke the needed movement to advance their diversity strategies.

Gaps and Inconsistencies in the Literature

As illustrated in the sections above, there are gaps and inconsistencies, which indicate the need to research how knowledge infrastructure is built within sovereign nations and their enterprises must be intentionally investigated (Jehn & Bezrukova, 2004; Jehn et al., 2010; Peterson, 1999; Rupert et al., 2010; Will et al., 2018). More research is needed to understand further and address the gaps and inconsistencies of conclusive implementing learning and development training within sovereign nations. According to Ayoko and Härtel (2006), most research has focused on the influence of workgroup results. The need for a greater concentrated emphasis on strengthening learning and development training inside sovereign states is highlighted by this work.
More research is needed to understand and address the gaps and inconsistencies in diversity and inclusion within enterprises. Researchers have primarily focused on building enterprises yet have not thoroughly examined how minorities can advance beyond their positions and how their diversity characteristics can better all. The generational and societal problems minorities face today are gaps and inconsistencies indicate more extensive than any enterprise or person. They have since evolved before establishing *Title VII of the Civil Rights Act of 1964*. This topic continues to be an opportunity to fill today's knowledge gap about advancing minorities through diversity and inclusion and their overall impact within enterprises.

There is a call for further assessment to determine the empirical results of advancing minorities into global leaders, specifically Indigenous Americans. As such, there have been limited discussions of researching the impact of diversity and inclusion with ongoing socio-cultural shifts in organizational contexts over the past decades. Many factors will always contribute to the expected and warranted change in diversity and inclusion. However, the inconsistency of diversity and inclusion needs to be fully explored to its full scope and should be highlighted for future research.

Diversity, Equity, and Inclusion policy (DEI) should combat systemic racism. Bentley et al. (2017) state many challenges in overcoming systemic racism. There have been initiatives to implement DEI policy by developing resources and overcoming technological limitations to combat systemic racism (Bentley et al., 2017). These ongoing efforts are remarkable, yet other strategic interventions, such as incentivizing diversity, equity, and inclusion programs, may be necessary to cultivate an environment that fosters anti-systemic racism research of diverse populations (Bentley et al., 2017; Prilleltensky, 1994). Advancing DEI is critical to advancing the common good, increasing effectiveness, and enhancing society’s impact. By facilitating DEI
policy, institutions will provide the momentum for global leaders in social justice by championing change and raising awareness of the importance of DEI in the field. These minority leaders will use their influence to recruit other minor leaders to take up the cause by supporting their actions.

**Chapter Summary**

This chapter explored a scholarly analysis of relevant literature to provide more information about the subject. The literature review analyzed knowledge infrastructure, knowledge management, learning and development, organizational learning, traditional indigenous knowledge, and diversity strategies. This review provides persuasive evidence regarding how learning strategies can benefit sovereign nations. The literature review also highlighted the scholarship with similarities in building and sustaining learning. The themes identified in previous works clarify how critical knowledge infrastructure is for sovereign nations and future generations.

When individuals work together, sovereign nations may increase its performance and be better equipped to tackle issues when they arise. Improving knowledge infrastructure can also help to alleviate enterprise-wide issues and encourage employees and tribal people to learn from their failures. This chapter also describes knowledge infrastructure by presenting its definition, relevance, benefits, influence, and impact. This literature review summated scholarly articles that provided a contemporary and historical perspective to validate the need to understand diversity and inclusion efforts within enterprises. It also established how Indigenous Americans are the main actors forced to exist in a narrative that often tells a different story from the majority's perspective. The literature suggests that (a) there are mixed reviews on knowledge infrastructure efforts within an organizational context; (b) historical socialization within enterprises has
undermined traditional knowledge, which has prevented Indigenous Americans from existing; (c) learning and development training for employees with sovereign nations have been lackluster; and (d) how operating as a sovereign nation has created a robust process that continues to affect how Indigenous Americans occupy space with global environments.
Chapter 3: Research Methodology

Chapter Overview

The study’s methodology was presented in this chapter. This chapter was structured to be replicated if the same conditions of the study are followed. Additionally, this chapter described the philosophical frameworks utilizing a global-view perspective of constructivism and a semi-structured interview methodology. The phenomenological approach to this study was a descriptive qualitative inquiry (Creswell, 2014). Moreover, this chapter included the following sections: Chapter Overview, Context, Theoretical Framework, Research Design, Setting and Sample, Human Subject Considerations, Instrumentation, Data Validity and Reliability, Data Collection, Data Management, Data Analysis, and Chapter Summary.

Context

This descriptive phenomenological study explored the impact of knowledge infrastructure within sovereign nations by examining the lived experiences of individuals that support or have supported sovereign nations. This study included 15 subjects. The central research question of this inquiry is, to what extent, if at all, might knowledge infrastructure support generational advancement through learning and development programs within a sovereign nation? The narrative guiding this study explored how building knowledge infrastructure might create a conceptual framework that could effectively scale enterprises within sovereign nations for future generations.

Theoretical Framework

As detailed in Chapter 2, the literature on knowledge infrastructure within sovereign nations is still lacking, as much literature is focused on tribal gaming and sovereignty. However,
the researcher identified five themes that link the significance of building knowledge infrastructure within sovereign nations and their enterprises.

Constructivism and transformationalism are the researcher’s worldview due to lived experiences and navigating the world as an Indigenous American. The researcher seeks to understand how to advance Indigenous Americans within a socially constructed world by examining a cultural paradigm due to inherent bias, prejudice, and institutional racism. In researching literature on learning and development training programs within sovereign nations and their enterprises, the researcher found many gaps in their foundation.

The epistemological view of this theoretical framework is that the nature of knowledge has a goal of belief. The nature and justification of knowledge are the subjects of epistemology, a field of philosophy concerned with the nature and justification of knowing (Hofer & Pintrich, 1997). The ontology of the researcher aimed to classify and explain knowledge infrastructure. Sovereign nations will be better able to make informed decisions about how to approach their cultural and political sovereignty in ways that best meet the perceived needs of tribal members, community members, and employees. By cultivating different learning contexts, they may encounter with a better understanding of alternative theoretical approaches.

Knowledge infrastructure can build sovereign nations by establishing a generational framework that can promote learning and development programs. Implementing a sound knowledge infrastructure within the selected sovereign nation can be leveraged to advance in the educational continuum by incrementally increasing the complexity of their core competencies and leadership capabilities needed to have a competitive advantage.

The researcher used qualitative methods to analyze the results through different internal conceptual representations. The research aimed to show historical models of learning such as

The study aimed to find results that suggest that loop learning and transformational theories can be linked when designing and implementing knowledge infrastructure through learning and development programs. Knowledge infrastructure provides Indigenous Americans with the necessary knowledge beyond practical insights into operationally trained and will reveal new ways of systematically finding their untapped potential.

Knowledge infrastructure carries the potential to build educational and social awareness for Indigenous Americans while producing cognitive development. This dissertation explored the historical expectations and representations of cognitive growth limitations and why cognitive ecologies should be empowered to aid Indigenous Americans.

The research methodology was based on interpretivism. This approach was selected when conducting research due to the magnitude of the study’s topic. The phenomenon within this study sought to answer the central research question through the lived experiences of its subjects. As the research approach has been defined, the study precisely included various perspectives and experiences. It should aid further research in describing the phenomenon from global views.

**Research Design**

This study answered the central research question by analyzing, exposing, and translating evolving lived experiences within sovereign nations using an interpretive worldview that
informed action-based meaning and purpose. The parts of this research design are depicted in Figure 8, which include (a) the research approach; (b) the epistemology; (c) the research paradigm; (d) the research technique; and (e) the method adopted were all influenced by the researcher has identified problem and worldview.

Figure 8

Research Design

Note. The research design of the study.

Setting and Sample

Interviews for this study aimed to take place in June 2022. All 15 participant interviews were conducted online due to the COVID-19 global pandemic and the shift to working from home. Each interview was expected to be approximately 25 minutes and was conducted after work hours at 5:00 PM during the week and on weekends between 9 AM-5:00 PM. The selected 15 participants were a subset of the 30 participants requested to participate in the study. The ages
ranged from 21 to 65. These participants have been employed by a sovereign nation or live within a reservation system in the United States. Each participant did not have to have a college education.

The researcher utilized Zoom.us for recording of audio, and other video technologies were vetted and not selected such as Microsoft Teams and WebEx. The researcher’s home office is fully equipped with audio-recording capabilities and is a private room. Zoom.us provided the needed encryption for privacy and allow the participants conformability in not being interviewed in public, at work, or in an area that could have impacted the interview. This digital venue was selected to comfort all participants during a global pandemic, especially since many are expected to be in different time zones due to varied life schedules (Creswell, 2014).

The selected population consisted of tribal citizens, community members, and current and past employees within sovereign nations in the United States. The sample included Indigenous Americans and other minority groups, including African, Chinese, Hispanic, Mexican, and Irish, seeking a personal or professional status within a sovereign nation’s enterprise.

Because of the non-probability features embedded in the research objective and the specific characteristics of the population of interest, this study used purposeful sampling (Creswell, 2014). Purposive sampling is also one of the most prevalent qualitative sampling methods for acquiring subject perceptions and comprehending the study's recognized phenomenon (Creswell, 2014). This study required a semi-structured open-ended interview technique.
Human Subject Considerations

Care and concern was provided to all selected participants, as Indigenous American culture and traditions were rooted in this study. This is an essential aspect of ensuring the safety of the participants in this study. Since no specific enterprise was involved, permission from enterprises was not required. Also, since the participants used their off time, consent was needed. Each of the interviews was expected to last approximately 25-40 minutes.

Participants in this study were contacted via email using the researcher’s assigned Pepperdine University email. The email requesting participation is provided in Appendix B. After selecting participants, the researcher issued an Informed Consent form from Pepperdine University (see Appendix C) to those elected participants agreeing to participate in the study. Each participant was given informed permission and study materials, including the study's purpose, a thorough explanation of the Pepperdine University Institutional Review Board protocol, and a copy of the semi-structured interview items.

All participants' confidentiality were protected, and the three crucial human-subject characteristics of respect for persons, beneficence, and justice were implemented and upheld throughout the study (Beauchamp & Childress, 2001). To further limit risk and protect the identities of all participants, pseudonyms ranged from (KI1-KI15). Pseudonyms were used to reduce risk and safeguard the identity of all participants. Moreover, to further ensure confidentiality, no specific identifying information of the participants nor the enterprises they are discussing or employed at was permitted.

All participants were briefed on the expectations and be reminded to use “enterprises,” not “organizations” or “companies,” and not to refer to a sovereign nation simply as a “nation.” Only the primary investigator knew the identities of the study's human volunteers to ensure
further confidentiality measures. The information and data gathered from the interviews were examined (including recorded audio interviews, coding, interview notes, and transcriptions). Only the lead investigator and his dissertation chair could access this information.

The aim was to have no participants feel discomfort with answering the questions or expressing their lived experiences while being recorded. The risk of participation in this study was expected to be minimal. If discomfort or risk was experienced, the researcher would have suspended the interview and place the responses in a locked digital file to mitigate any further potential and unforeseen danger. Suspension of participants did not occur during this study.

Participants, enterprises, and society will benefit from the study. This study will help research by contributing its research to academic scholarship and professional practice regarding Indigenous Americans, other minorities and their advancement through the building of knowledge infrastructure. Once the study is completed, communities, individuals, nations, and society will have access to a foundational structure to begin determining how to build a scalable knowledge infrastructure model.

**Instrumentation**

A semi-structured interview method was used to collect data for this investigation. Semi-structured interviews use questions created before the study and may include probes that allow for more clarification or in-depth, relevant responses (Creswell, 2013). This study's semi-structured interview revolves around a single key research issue.

**Data Validity and Reliability**

The open-ended nature of the research question was chosen to: (a) align with the research approach, epistemology, research paradigm, methodology, and worldview; (b) prompt in-depth
responses about the participants' experiences, thoughts, and feelings; and (c) allow for planned and spontaneous probes as needed when interviewing the participants.

Two students from Pepperdine University's Education in Organizational Leadership (EDOL) program and two Ph.D. professionals affiliated with the lead investigator conducted an initial peer assessment of the raw data, research question, and interview protocol. In addition, three prior EDOL graduates, and Ph.D. students piloted the interview procedure. The interview protocol (see Appendix D) included items that sought to understand lived experiences from individuals who are associated with sovereign nations.

**Data Collection**

Data gathering began after a successful preliminary defense of the lead investigator's research proposal and approval by Pepperdine's Institutional Review Board (IRB) office. Data collection occurred between June 1 and July 31, 2022. Each interview was a semi-structured 25-minute discussion conducted through Zoom.us. Based on previous COVID-19 pandemic experiences, the data collection site was examined and chosen.

The researcher is familiar with all the subjects, and he had their contact information (i.e., email addresses and telephone numbers). The participants and the lead researcher had current professional relationships. A welcome email was sent to all participants, outlining the study's objectives and inviting them to join. Participants were notified that participation is entirely voluntary, and their identities were concealed behind pseudonyms (KI001-KI0015).

Participants received a summary of the interview process, a copy of the interview items, and a brief explanation IRB procedure in a follow-up email. The follow-up email included an informed consent form, which was reviewed and signed digitally before the interview. If the criterion was fewer than 15, the researcher sent a reminder email asking for more participants.
Subject verification (Creswell, 2014) confirmed that the participant's lived experiences and points of view were properly interpreted one week after each interview was conducted.

**Data Management**

Data from the interviews was collected, transcribed, translated, and coded using research software, HyperResearch. The researcher's data and information is kept securely on his password-protected encrypted PC and encrypted USB devices in a home safe. Three USB drives are used solely for this research project and is physically destroyed after five years. After the study is completed, all paper notes, files, and worksheets will be disposed of. His interviews were completely voluntary, and participants could opt out at any time during the research. After the study, participants will have the opportunity to review it. All study documents will be maintained securely at the primary investigator's home. The data and information acquired during the study will be maintained for five years before being properly disposed of and physically destroyed thereafter. Once the investigation is completed, all digital and paper notes, data, and worksheets will be erased.

**Data Analysis**

This study employed a qualitative data analysis, which necessitates a robust approach to comprehend society and evaluate people's behavior and experiences. This analysis transformed data into findings by bringing order, structure, and meaning to the collected data from the interviews. According to de Vos et al. (2005), the analytical method is more of a spiral process involving lowering the volume of data, separating important from irrelevant facts, recognizing patterns and trends, and developing a framework for presenting the core of what the data revealed.
The qualitative data was collected through virtual interactions and recorded in the form of observations and words on Zoom.us. The audio collected from the Zoom meeting was saved in mp4 format for easy transfer to different systems. This audio was converted and uploaded into the software Rev for transcription. Once the transcription of the interviews is collected, the researcher coded the data utilizing computer software to ensure minimal errors.

The researcher categorized and saved themes discovered in the data using HyperResearch. If the HyperResearch software was not accessible, the data would have been processed using Qualtrics. However, Qualtrics was not selected. Coding data aided in the summarization and organization of text data. This codification aided the researcher in evaluating transcripts by creating codes due to the nature of phenomena and themes utilizing color coding with marginal notes.

The researcher employed thematic analysis to connect similarities. This method uses a bottom-up or inductive approach to identify patterns in data by constructing themes through coding tasks (Creswell, 2013). The researcher's understanding of making sense of the data was revealed as part of the data analysis process. You may use distillation methods to filter the study data you received by limiting the scope of the data and sorting them out after the researcher identifies the prevalent themes (Creswell, 2013). Chapter 4 provides the findings of this investigation.

**Chapter Summary**

The methodological inquiry for the planned study inside this research study was discussed in Chapter 3. Figure 8 depicts the precise study design, which includes a heuristic-aligned research strategy, constructivist epistemology, interpretive research paradigm, descriptive qualitative research technique, and a semi-structured interview-based method. The
suggested technique is consistent with the study's goal of determining if creating a knowledge infrastructure through learning and development programs which can influence generational change. The responses from participants show the fundamental aspects of advancing a sovereign nation through knowledge infrastructure.

A semi-structured interview method was used during this study, and the results were examined accordingly; The problem statement also aligned with this technique. The qualitative data collecting methods, validity, and protocols would be implemented throughout the study to ensure consistency and integrity were also discussed in this chapter. In addition, the IRB regulations and human subjects' rights considerations were discussed to highlight the safeguards put in place to protect and limit the dangers to study participants.
Chapter 4: Research Findings

Chapter Overview

In this chapter, the key findings of the descriptive phenomenal qualitative study are presented. It presents the information in the most accurate, impartial, and judgment-free way possible. The research results show how the chosen research approach was used methodically and with care. This study aimed to represent the participants’ perspectives accurately and fairly by highlighting the relationships between the interview items and the descriptions and overlapping themes offered by each participant’s responses. This chapter consists of the Chapter Overview, Context, Study Participants, Interview Items, Presentation of Findings, and Chapter Summary.

Context

This descriptive phenomenological study aimed to explore the significance of building knowledge infrastructure within sovereign nations and their business enterprises by examining the lived experiences of individuals affiliated with sovereign nations. The central research question for this inquiry was, “to what extent might knowledge infrastructure support generational advancement through learning and development programs within sovereign nations?”

Many sovereign nations have failed to build the knowledge infrastructure necessary to support their tribe for several generations. Such infrastructures can successfully thrive in a complex, dynamic, and complicated global market and world. It has been difficult for sovereign nations to advance due to the lack of knowledge infrastructure. By overcoming this obstacle, a viable operational model for knowledge infrastructure can be cultivated by establishing best practices and techniques that will need to be created, benefiting sovereign nations.
To determine what processes and strategies are used and are needed in sovereign nations to build knowledge infrastructure within their business enterprises, 12 interview items were given to 15 participants to acquire their responses in understanding what has, what is, and what should happen in Indigenous communities. Additionally, the participants' opinions about knowledge sharing were identified by research participants, and then recurrent themes were found in the data. Following that, these topics are explored and discussed in subsequent sections in this chapter.

The creation of knowledge infrastructure within sovereign nations and their business enterprises is strongly encouraged. Interventions to scale knowledge infrastructure within each sovereign nation are necessarily constrained in terms of cost, time, and effectiveness due to the delicate nature of a tribe's culture, ideologies, and customs. Sovereign nations cannot offer ongoing development opportunities for their communities, tribal members, and employees because many development programs are difficult to scale. Drawing insights from the behavioral, ecological, evolutionary, and physiologic domains improved the accuracy and applicability of classification during the coding process by using converging identification patterns amongst data sources.

**Study Participants**

This study addressed the problem of the lack of building knowledge infrastructure with sovereign nations and their business enterprises. The participants responses collected from the study was intended to provide the factual representation of data with evaluation and interpretation.

The study sample comprised of 15 individuals and 15 participants, including 7 Tribal Citizens and Community members. All participants fit the below screening criteria:
- Be at least 21 years old or older;
- Be a tribal member, community member, or have been an employee that currently or has worked for a sovereign nation in the United States; or supported a sovereign nation in business, consulting, or education and;
- Have experienced learning and development programs or training in a professional setting.

Participants were selected through a professional network and snowball sample design identified from the professional network of the researcher. This network includes individuals who are tribal members, tribal community members, and current and past employees of sovereign nations. Of the interviews completed and received, each was included in the final analysis.

**Demographic Profiles**

*Front-line and C-Suite Employees.* Employee demographics were captured mainly through the selection process and complemented by the interview data as it provided a holistic voice and representation of indigenous nations. Of the 15 participants who completed the interviews, 53% were women, and 47% were men. According to other studies in the literature, this distribution is very balanced. The age of employees ranges from under 23 to over 62, which is represented in Table 2. Employees included front-line employees to C-Suite executives. Sixty percent of the participants were front-line employees, 20% were management-level, and 20% were C-Suite executives. Sixty percent of the participants identified as Indigenous Americans, 10% were also of African American descent, and 30% were of Hispanic descent.

*Tribal Citizens and Community Members.* Tribal Citizens' and Community Members' demographics were captured through the selection process. Of the 15 participants who completed the interview, 23% were women, and 67% were men. The age of Tribal Citizens and Community
Members range from under 27 to over 56. Forty percent of the participants identified as Tribal Citizens, and 13% were Community Members. Table 2 identifies the participant number and basic demographic information used to appropriately connect specific quotes with the respective assigned ID codes while maintaining confidentiality.

Table 2

*Interview Profiles of Study Participants*

<table>
<thead>
<tr>
<th>Number of Interviews</th>
<th>ID#</th>
<th>Gender</th>
<th>Age</th>
<th>Business Type</th>
<th>Tribal Member / Community Member</th>
<th>Region</th>
<th>Ethnicity</th>
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<td>M</td>
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<td>I</td>
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<td>N</td>
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<td>FLE</td>
<td>N</td>
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</tbody>
</table>

*Note.* Gender: M=Male F=Female; Age(1)<50-year, (2) 50-59,(3) 60+; Business Type: FLE=Front-Line Employee, M=Management, C=C-Suite; Tribal Member / Community Member: Y=Yes, N=No, Region: SW=SouthWest, USA MW=MidWest, USA; Ethnicity: AA=African American, I=Indigenous, and H=Hispanic.

**Interview Items**

Based on the research question, 12 semi-structured interview items were developed comprising the interview protocol (see Appendix D), which included:

1. Which employees in your enterprise would benefit from knowledge infrastructure being built?
2. How does the enterprise support employees in building their knowledge of indigenous culture?

3. How would you change (or develop) current processes to sustain the creation of knowledge infrastructure within your enterprise?

4. What existing tools can be used to aid efforts to build knowledge infrastructure?

5. What new technologies are required for knowledge infrastructure construction?

6. In what ways do technological advancements support indigenous knowledge?

7. What is the role of indigenous knowledge in enterprises owned/operated by sovereign nations?

8. Why do you think knowledge sharing is essential for enterprises?

9. How does knowledge-sharing impact the growth/sustainability of the enterprise?

10. In what ways does the employee training include aspects of indigenous knowledge?

11. What abilities and skills are required to succeed in a sovereign nation’s workplace?

12. Identify barriers that prevent employees from acquiring these abilities and skills.

Fifteen audio-recorded Zoom.us interviews with people connected to sovereign nations participated in this study. Pseudonyms were given to the participants to retain confidentiality. The chosen pseudonyms used for identification and referencing throughout this chapter vary from “KI001” to “KI0015.”

Presentation of Findings

The results of qualitative analyses of the interview data are presented including but not limited to viewpoints on establishing knowledge infrastructure and generational development. Through the thorough depiction of people's lived experiences, conclusions were drawn. Where appropriate, interview data were complemented with responses to offer a more thorough and reliable analysis of the material.
Utilizing Rev, the transcripts were divided and reorganized according to the interview items. This gave the lead researcher a chance to consider each question by having clear and detailed responses. After that was finished, 233 codes and groups of responses that were created. In the end, it was determined that almost $\frac{3}{4}$ of the 233 codes had characteristics in common with the research objectives (see Figure 9).

**Figure 9**

*Frequency Graph*

![Frequency Graph](image)

*Note.* Frequency graph illustrating coding results as a frequency report in HyperResearch.

Participants were asked specific questions about the benefits, challenges, and processes for building knowledge infrastructure. Given the nature of open-ended questions, participants provided multiple answers to questions. The next item identifies that participants see many benefits to building knowledge infrastructure within sovereign nations. Three-fourths of respondents indicated that knowledge infrastructure is needed for growth and sustainability as critical benefits of generational advancement and development. Security, strategy, and wellness benefits and advancement of tribal roles within enterprises for the future followed this. The
The following pages display the findings for the coding process for all interview items (II1 through II12). The findings are broken up by each interview item.

II1: Which employees in your enterprise would benefit from knowledge infrastructure being built?

Responses included:

- I think this would range and start up with frontline employees. They would be able to use a knowledge infrastructure that the enterprise would be providing. I think this would also go all the way up to, from frontline all the way up to maybe a manager level, just because I think, like being on that level, we would be the ones who would most likely be disseminating information, learning the information, and capturing it when it comes to the director level. I think the way that they would perceive knowledge infrastructure, or I would, or even maybe knowledge sharing would be a little bit different just because they have different ways, but like more, resources to gain, to use, to collect knowledge over people who are in, lower positions managers and below managers, the frontline employees (Knowledge Infrastructure; KI001).

- It's any number of employees from a variety of departments that would benefit from knowledge infrastructure. In my view, I think first responders would greatly benefit partly because they're dealing with issues of life and death in urgent matters. And for them to know about these important issues affecting native nations and the outside world, I think, would better inform their activities and important responsibilities. I think people working for the tribal government would also benefit from that. These folks could be in the legal department, and perhaps people working for the tribal office of communications, or maybe they are administrators reporting to the tribal council their responsibilities for the tribe. I think they would have a better perspective if they had this type of access to knowledge infrastructure (KI001).

- If the tribe has business enterprises, some tribes have casinos and other businesses. Certainly, those employees work for the different enterprises owned by that native nation. They could benefit from that as well. Sometimes when you're working for a casino or some other business, you can lose sight of the fact that that business reports to the tribe and its government. And so, by providing the business employees with a grounding in this type of important education, it makes them more aware of whom they are supported by (KI001).

- I think there are multiple employee groups. So, I think our leadership audience is primarily right in terms of help. And so, what I've seen in the enterprise that I've worked at is a lot of the current leadership knowledge has been pieced together kind of trial by error, you know, kind of that sink or swim mentality. And in that enterprise, in many ways, they've been successful at a fault, right? Meaning that it's unnecessary; you can't say leadership is necessary for the drivers of success. It's a lot of other factors. So, I think, I think first for first and foremost, it's the leadership audience to make sure they have, you know, modern, modern skills, both operational and soft skill-based, to lead our workforce and own their business area and make decisions for their business (KI003).
• I would say it would start with management. I mean, that’s the basis of the business. The management has to start from there, and it trickles down. And I think they have to grasp it better. So, I think management will most benefit since they're right in the middle. And then maybe I would be unsure if you would move upwards, you know, to a more, director role or, or even a VP role, or, you know, move it down from there (KI004).

• Honestly, I feel like everyone. Everyone, from leadership to folks underneath leaders, would benefit from it because they would have the capability and access to knowledge. That'll help them with their job, with the business endeavors, just like it's necessary to have knowledge (KI006).

• I think that when you don't have leadership, I've seen examples of them not understanding the benefit of knowledge, then it's not effective because then there won't be any investment. And if there's no buy-in from the top down, how can the information trickle down to people needing it the most? And I think that if you don't have that buy-in, you're also not going to have those, those that have power being able to use that power to, you know, making sure that that infrastructure is not only available but sustained because I feel like it's something that needs to be constantly maintained. It's not something that you build and then walks away from. So, I've seen many instances where they don't see it as important. And then you see, you know, things that, knowledge has helped or prevented, not be used unless it's like an agency, right? Or something that they want to invest in because there's a problem. But if they had invested in it the whole time, then we wouldn't have an issue (KI008).

• I'd like to say all employees would benefit from building knowledge infrastructure, but I specifically more at the individual contributor level, particularly within their first 90 days. I think it's super impactful to call upon some structure, no matter what it's related to. Suppose it's related to the history of the tribe, the importance of sovereignty, the importance of being able to complete their job properly, and their resources. Those are the kinds of things that I seek that create skill gaps, which create a poor onboarding and a poor introductory period for people, which can sometimes contribute to, you know, dissatisfaction or even potential turnover. So that's, that's my thought (KI008).

• I believe all leaders would benefit from building knowledge infrastructure. I work for a small tribal nation that needs to develop. If a leader thinks they don't need to develop continuously all they have to do is wait until tomorrow because something else will arise. So, you will be waning if you're not constantly learning and developing your skill sets. I think most important, most importantly, I think the top echelon, if I had to say, is learning and development towards and understanding the culture of the tribe. So, they can better guide the enterprise along the same path as, what the tribe intends, and the sovereign nation intends. I think the greatest impact you have is new team members that are young to the workforce and not as experienced because if you can develop leadership and management, you're capitalizing on an untapped and potentially unbridled resource. You'll have the opportunity to exponentially grow your enterprise for the tribe through an effective training if leadership and executives can convey what is expected and supported to draw knowledge infrastructure (KI0010).

• Yeah, so I think, with knowledge infrastructure, the immediate response is everyone, you know, can benefit from knowledge infrastructure, but, you know, as I further think about this, I think, when you look at the enterprise specifically on itself, you know, a lot of the workforce, I think from the front of the house to mid-level, employees, I think those are
the ones that could benefit from the knowledge infrastructure. And the reason why is that this is where your highest population of folks are working in the many tribal enterprises. I think the upper management and executive folks, they have a really good understanding of the overall knowledge infrastructure that exists today. But I think the gap right now where you see it amongst enterprises is in the lower tier where the majority of your workforce is. And I think focusing on, again, the entry-level folks, some of the folks working boots on the ground, the mid-level supervisors and managers, is where we need to focus our knowledge infrastructure. Because again, that's where your highest concentration of folks are in and that's the group rotating amongst more leaving the enterprise or new folks coming into the enterprise. And I think that's where the heart of the knowledge infrastructure exists, both for the enterprise and the tribe (KI0011).

- I believe any department that provides internal services that align with organizational structure, the culture, any form of information sharing. And I would even say any department that has to understand the physical environment for sustainability is probably a department that comes to mind. More specifically, maybe like our cultural resources team or education, right? There's not only, culture and structure they're providing, but they also have to understand the physical environment, the reservation, not just from an enterprise perspective and the growth, but to share with the younger generations. Let’s say we're moving to something more specific, like information technology, which will affect house system operational infrastructure. But suppose I can think of something that could tie back to our cultural resources in education. In that case, I can think particularly of a group, which essentially manages safety and security like geographic information systems and contribute by doing outdoor mapping of the landscape of our tribal regions. Right. Which can be beneficial from, not just for the tribal youth, but also for anyone who, who is going to be new to the enterprise and needs to understand, what the process is and what, what the culture is like at our enterprise (KI0013).

Participants were asked generational-type questions related to challenges, definition, perception, challenges, and planning of knowledge infrastructure. Definitions of generational needs were quite similar. The next item identifies that respondents identified the constant struggle of the enterprises informing how tribal committees make decisions, not having tribal citizens and community members not working in their respective enterprises and receiving incomes from enterprises' gross profits without having to work. However, participants indicated that to help build generational development; knowledge infrastructure will need to be integrated by enterprises to ensure sustainability for future generations by upskilling employees and tribal members. The following are statements from owners reflecting their unique perspectives:
II2: How does the enterprise support employees in building their knowledge of indigenous culture?

Responses included:

- I would say there are a few ways. The first thing is through new employee orientation. It has been a while since I've been through an orientation, so I don't know if anything has changed, but when I went through it, I learned about the history of the tribe and how they got to where they are today. So, from day one, they're teaching the employees about that. And then also, when we have big team meetings, the tribe introduces words from their language and teaches us what those means. So that's another way that they help us to learn about their culture. They also have a magazine that they print out. So, both the employees and the guests can learn through the magazine, as well. And then we have a website for employees and the general public, where they can post different things (K1002).

- There are many different examples of this all over the enterprise. And I just thought that was so cool. I'm like, I don't know who came up with it or how they know this information, but that's cool that someone knows enough about the Native American lifestyle that they were able to come up with these products. I mentioned that it ties it back not only to the Native American lifestyle but also, in essence, helps with protecting cultural sovereignty, this idea that we learned in our tribal program, really being able to inform and really protect the identity of Native Americans, which is, I think is an aspect that often when you are looking at local casinos that are own and operated by sovereign nations, that you specifically assume that it's just all about slot machine and money. In actuality, every little aspect of local casinos is tied back to the tribe somehow. And especially just how they're conveyed, there is messaging, there is like thought behind the intention of releasing even certain products rather than just selling them, to make a quick buck. There are actual processes behind that. And I think it's important, especially because this goes into the knowledge-sharing of indigenous culture (K1002).

- I think the first and foremost is you got to be in the business, to understand how indigenous culture is tied throughout? You can't build those processes or training of indigenous culture by making decisions from your desk, from your office. The first and foremost piece is that you got to go out there to gather and seek how to information on how to incorporate indigenous culture in training. You got to get out there with the teams and see what they're doing and, and, and identify those opportunities and, and talk to leadership and understand their pain points and things that, the challenges they experience, and you know, and, and that's not, that's not, that's a long-term piece right there. Especially the enterprise that I work in, indigenous culture is at the forefront of commonalities within the enterprise (K1003).

- Within my tribe, indigenous culture is shown within the sustaining the business and the government. That's sovereignty; it gives them an extra layer of responsibility and meaning. I mean that sovereignty is even more fragile than business and needs to be emphasized. I believe it, and it does give it a different dynamic to illustrate the incorporate indigenous culture and knowledge. But it's all in, in the understanding of how indigenous culture is incorporated in daily work life. It's the enterprise itself, even
spreads that indigenous knowledge, which, I'm familiar with one, but don't know how much they elaborate on that. But in my experience, you know, the business side, the casino side employees are versed do have a full understanding of, indigenous, culture history or knowledge (KI004).

- Were they share a little bit of their culture and, you know, certain events, charitable events where they do spread, some of their, you know, history and, you know, even some of their, you know, history and, you know, even some the language. But, of course, it's nothing of formal education. And, I mean, it's hard for people to grasp. It is nice that they make it available when learning a different language or culture. It's out there, events as well. You know, I like that they're doing that more monthly. I think maybe the only program, , you know, is, is the; it's a tribal administration program. Still, if there were to expand that, I think it would be more beneficial. Still, they do, they do make attempts to, to educate the employees, but it's, , you know, where there are many employees, so I mean, it's, it's whatever they make of it, but there, there is, attempts at it and, definitely could be improved (KI004).

- Informational videos are shown about Native Americans, who were part of the enterprise. So, I think that was one way of sharing knowledge indigenous culture, even if it's not within their tribe. That was a good way for me to find out about it. I think there's also something called like a certificate program that they're offering to who, you know, employees who would apply it, who would be, I guess, recommended. We also have a new employee orientation, in which we share the history of our tribe, of the tribe we support, how they came about, how they started, and how they're going to move in the future. In employee orientation, we share what they are doing and what projects they have every so often with certain levels of people, not necessarily frontline employees, but maybe managers or professionals and above. So, I think that's the way of sharing their culture and infrastructure with non-tribal employees, non-tribal people (KI005).

- I think it's very important. Again, one of the critical things is being able to help people, not just to know it, but to connect with it right. Because you can know it all you want, and you can understand the mission and you a mission statement, and you can know it by heart, but if there's nothing within you that connects with it, that's where that's the missed opportunity. So yes, hugely important to be able to keep people, you know, engaged and to want to stay employed because, you know, it helps them understand the way that business is done and who they are serving. I think that understanding indigenous culture and knowledge, even if it's not innate, it can help someone say, okay, you know, some of these things and some of these issues, some, you know, bureaucracy and all kinds of things that happen anywhere in the business, if they have a better understanding of the why behind the what, just like anything it helps. And they can know, connect with it and say, okay, I can sometimes endure when things are a little bit, you know, mixed up or shaky, or we're trying to gain some ground on things, because I know why, and I understand it my contributions to the tribe. And this connects back indigenous culture, that voice of that guiding coalition, the people who've stayed around the longest, they've been able to endure because they're connected to that, the spirit of why the tribe does what they do and what they represent (KI008).

- Yes, there's much emphasis on the early history of the tribe itself. It becomes very targeted toward this particular tribe. However, it speaks to some of the things you don't learn in your history books related to indigenous people. And that's a part of the emphasis
for all team members initially with any initial training. All of the other training within our particular enterprise is undergirded by the importance of the tribe, maintaining their sovereignty, for them to continue to maintain and build their culture. And so that that's really, it's injected into all training at certain levels. It's not overbearing or, you know, particularly just laid in with that, but it is part of the training that goes on within the tribe I serve (KI008).

- I think also when you're, when you're considering arts and artifacts, I think being able to interact with those who know and understand them, like you said, like language in the restaurant, part of the virtual reality experience would be hearing and virtually seeing someone who could speak the language, who could demonstrate how to make a basket or how to harvest them, the Yucca that they do, or even the, you know, those who might be a little bit more theatrical, and this is, might also be personal to me, but, who might be more theatrical to be able to act out or, you know, display certain things that might have gone on culturally before the be, before the tribe was on the reservation or as they started to settle into life there (KI008).

- I think everything's so readily available. And the thing is, between the utilization of technology and social media and how those two things are combined, people now have platforms for any and everything, and those using it to their fullest reach many people. And as long as I think, the tribe continues to capitalize on the things that make them unique and prominent in the community. I, I think they could use those to, you know, speak loudly about, you know, indigenous people and their journey and their struggle and their own, you know, continuity as a tribe. I think if they can, like I said, as long as they continue to learn and figure out what drives people to those platforms and what connects people and what draws them in, I think she is as long as they are working with the right people, the right, you know, subject matter experts, I think that they'll do fine with being able to, to share their indigenous history and, and, and keep it at the forefront (KI008).

- Well, my enterprise does a tremendous job. They incorporate it because working for a tribal nation isn't work, isn't the same as working for a different corporation, like an Amazon or a Facebook or a Chevrolet, any, anything like that, it's, it's different understanding that, that we're working for a separate federal government and, and so understanding their culture and how they came to be and their way of, of thought and understanding that gets you to understand the enterprise that, which you're working for and allows you to connect the dots and, and fill in those pieces. , it's the biggest way to understand why you work for and with an enterprise. And then I think as a team member, no matter what, you should understand what enterprise you work for and, most importantly, why you're working for it. And I think it really would put those in, in direct connection (KI0010).

- Yeah, so, our current the current enterprise supports indigenous knowledge in a few different ways. I think the first thing that comes to mind is just really educating everyone about the history of how the enterprise was created, that it wasn't something that just came, you know, out of nowhere, there was a lot of legal battles and a lot of different things that had to happen to develop the enterprise for where it's at today. Another very important item is that there's much symbolism across the enterprise showcasing whom you're working for. Uh, and from an indigenous standpoint, when you walk into, the building, you, you see, not in, by, but words in the traditional language of the indigenous group that the enterprise owns, also too, in, in team meetings or enterprise-wide
meetings, you get exposed to different cultural activities, that, again, refrains that message that you're supporting an indigenous enterprise, own and ran, and I also think too, the tribal values and principles that we have to follow as we operate the enterprise is another way to reinforce. And I also think too; you have much indigenous leadership that participates in showing up to the enterprise and tying back in why the bus, why the enterprise is so important to the tribal community (KI0011).

- It's very limited. I think the enterprise can do a, a, a better job, you know, at bringing in that indigenous knowledge. It's difficult to bring that on, but not impossible because many of these enterprises are growing fast. Uh, the demand is there, or a lot of the folks are already focusing on the business or are just busy or at capacity or spread thin. And indigenous knowledge is the first thing that's kicked the curve. And again, that's why I'm going back to my main comment is like, we need to make sure that as an enterprise, we, we, we, we start by saying that the reason why this enterprise exists is to support the tribal sovereign nation to support our tribal citizens, and to con to continue to protect that tribal sovereignty. Uh, but again, many enterprises now and the one that I work for, we're, we're, we're always just trying to stay ahead, you know, or, you know, or stay on, on track. Right. And you can't focus on indigenous knowledge when trying to find out who will cover the next shift. It just takes people away from that (KI0011).

- I think that, from what I was exposed to, the initial onboarding experience was one of the only trainings I received. I think that being able to expand and maybe attend some of the powwows or, or what we used to have, the employee, all, all hands meetings. Right. I think those were able to expand my knowledge and see where the tribal citizens are coming from. But I think this is a particular point we can focus more on (KI0013).

- In my specific enterprise, I, there are many things. What I know of off the top of my head is I know that there is there's a tribal certificate program that people can enroll in, to learn about native history and governance. They also hold a, I don't know if you can mention the pow wow, but they have a, they hold events open to the public that can spread the knowledge amongst them. This greater community is open to the public for people to come and learn and, and see, see the culture before their eyes and take it all in. Our team meetings, our enterprise team meetings, corporate, import cultural aspects such as the dancing and using the native language, which I don't think I would've otherwise been exposed to. If I didn't work for a sovereign nation, I wouldn't hear the native tongue. I wouldn't be seeing the medical dances if they didn't, you know, incorporate it into something that the entire team gathers around and gets to witness. And I'm sure that there are many more things, but that's what I think offhand (KI0014).

- My particular tribe helps supply their indigenous knowledge by dedicating a building, ceremonies, educational opportunities, media, and training... I know that it's a wealth of knowledge... Additionally, they offer a speaker series, so that's another way they can be educated about indigenous knowledge (KI0015).

- I think everybody can benefit from indigenous culture and knowledge and being, you know, just educated on things that they don't already know. I think especially if you're running an enterprise, every employee is an ambassador of sorts and is a, is a face and a voice for your operation so it is crucial for employees to understand indigenous culture as it will help you understand the struggles that come with losing sovereignty (KI0015).

- Yeah, within my tribe we always emphasize what is indigenous culture and why it is important to building knowledge. It builds community and hopefully builds trust. It
would be really exciting to know that it's to know the values and the mission of those with whom I work. Because if I'm going to be a part of that, I want to know what I'm investing my energy into help, to help build. I would feel incredibly valued. And to know that I feel valued as an employee because it goes to the values and mission of the tribe. I feel a warmth about that. It helps my morale, it helps the morale of my coworkers, and it provides an opportunity for you personally to succeed, the enterprise to succeed, and the tribe to succeed (KI0015).

One participant also indicated that they would like knowledge infrastructure built into a sovereign nation’s constitution as this would create a policy that would require its enterprises’ to implement to help minimize bureaucracy. This participant had concerns that if not written into policy, enterprises and their executive will run enterprises based on marketplace trends rather than indigenous needs. The next items suggests the viewpoints of employees, tribal citizens, and community members and how they articulated and recognized an understanding that adaptable proceed and strategic visioning will help establish better frameworks and processes that can be amended to support business and professional needs. The process development will be beneficial if a systematic approach and application of knowledge, resources, and tools are available to deal with change or future development of processes.

II3: How would you change (or develop) current processes to sustain the creation of a knowledge infrastructure?

Responses included:

- Well, I think generational advancement in large measure connects to education. Education and training provide opportunities for these employees to receive, you know, periodic, if not regular, education and training about tribal sovereignty, about tribal culture, about tribal history. That will make all individuals more cognizant that their enterprise is part of something larger. They're part of a sovereign tribal nation that is eternal. It's not like working for company A or company B. Your part is larger, and there's a much more important purpose out there (KI001).
- I'm relatively new to my particular enterprise. And so, this may be something that is being executed by current leadership to align with the tribe’s mission, values, and vision. I think part of the knowledge infrastructure building it and solidifying it, will have to be connected with the voice of the people who know the enterprise the best. And those with long-tenured knowledge who spent, you know, years of working from the beginning, of
when the enterprise first started, I think that's going to be critical. I know that the tribe themselves and those who are tribal citizens or community members within my tribe have an authentic voice as far as that is concerned. I would encourage processes that use their voice of the guiding coalition. Those voices will be critical because they will be able to share things that many people don't know about what happened and to make this enterprise take off about all the blood, sweat, and tears. So, for me, I think one of the most important pieces is having that voice and hearing from that particular guiding coalition. That's, that's my opinion (KI008).

- I think I would start on developmental plans for employees. I'm trying to create like individual development plans to understand the individual and what drives them. Within my tribe, we do not have such plans or processes to develop people effectively. Everyone should be included in these plans, but it should be different at each level (KI009).
- With my current tribe, I would incorporate getting more tribal citizens to work alongside, or at least be in and around our enterprise because our enterprise is a little unique, we're a smaller federal nation with a large enterprise. I think there is starting to become a disconnect between the different entities and incorporating a bigger, more robust, and even sometimes a mandated internship program. It would allow the tribal citizens and community members to better understand their government's business model and economic driver. And I that's something that I would institute (KI0010).
- We already have like standard operating procedures that could be tailored to indigenous culture and knowledge. I do understand that we have team members who have been a part of the tribal program. I believe that if we had some of that, some of the people that have attended, right, can contribute to their understanding of what was taught about the people and their culture, and to internalize that, to make it, like organizational liked, or understood by the enterprise, if that makes sense (KI0013).

The participants explained that technological tools would provide a stronger foundation to help complement existing infrastructure. Their answers were broad but captured what was available to them as tools within their roles. The next item suggests that existing tools can drive long-term growth and success in the modern business world simply because they help expedite numerous processes. Still, existing tools may only progress processes if they adequately advance initiatives.

II4: What existing tools can be used to aid efforts to build knowledge infrastructure?

Responses included:

- Well, for our tribe, I would say our employee website is an existing tool that we have that could be used to aid efforts to build knowledge infrastructure. We also utilize social media such as Instagram and Facebook to post and interact with guests outside of the reservation. different things. So that's a tool one of my coworkers used to put information out there. I would say broadband because I learned that many tribes have issues with that. And even during COVID, kids couldn't do distance learning because they couldn't access
the internet. And that's, you know, a basic thing that so many people have, and we don't think of that, but our people on reservations don't have that access oftentimes. They don't have that technology (KI002).

- Our tribe has been using many apps. I don't exactly know what they're building, but I do know that they are building apps for the tribe to improve communication within their tribe. And even to other things out here, I know we've been making websites for them. That's also helpful. A lot of the tribe, I would say, are still more old school in how they use communications. So, it's a good balance of what we have. We can cater to both the older and the newer generation. I'm not sure of have any other technologies that I know outside of the Internet, Microsoft, and Zoom; That's not exactly it, but it's technological tools we have on our reservation (KI005).

- The existing tool we have is Microsoft, but it is a bit outdated. I use technology, but many of my team members don't use the tools available to them. For example, we have a learning management system, but employees only take it for compliance purposes, not developmental opportunities. We are now using Microsoft Teams. I use these tools a lot, but most of my management, they don't cause they don't understand it. They never really got training. So, I think Microsoft Teams is a huge, huge thing. And, Microsoft, I like to use the OneNote, so I take notes. We have WebEx but we don't use it (KI009).

- I think that for what I currently do now, my contribution would be, primarily understanding like our market problems but using the technological tools we have on our system, and the way that I've done them now is through story mapping or journey mapping, where you can do a segmentation of different audiences. And once you have captured, the why you are doing this, you can trickle down to your immediate teams, which in my opinion, is critical to working for tribal government, right captured. Because some of those same processes are, are not just about doing it the way it has always been done but doing it because it is efficient for their advancement (KI0013).

- Yeah, cellular, email, social media, LinkedIn, and a lot of it on LinkedIn. I learn much about Native American history through LinkedIn because so many people on my LinkedIn are from a sovereign nation enterprise and we discuss tools needed to be successful. So, I would say LinkedIn is probably the biggest existing tool for me personally that exposes me to other things (KI0014).

Several units of technology were mentioned. The next item suggest that technology serves as a conduit for knowledge sharing between nations and society. Data sovereignty was mentioned to inform why nations may be at risk if their information is not protected, which was detailed as a reason why nation do not share their knowledge outside of their reservations.

II5: What new technologies are required for knowledge infrastructure construction?

Responses included:

- Well, in addition to access to broadband internet, you certainly want computers. You can also, I think, just as importantly, and perhaps even more practice to get in the hands of
many of our friends and reservations, tablets that have access to broadband internet; perhaps if you can drill down a little more specifically, you want Wi-Fi. You don't want people always having to be chained to a desk so that they can hook up to the internet. So, the more that you can create strong Wi-Fi networks that have to the extent possible a wide range that requires antennas perhaps, that is crucial (KI001).

- There is a need to practice new technologies; I would say that technology will need to get in the hands of many of our friends on reservations so they can have access to broadband internet. Right. So, like my enterprise where I work for, for example, we have internet, and it kind of looks like social media, but then at the same time, it does not. Then again, I think, I think if we utilized it correctly, if we brought in some of the ideas to infuse information that internet provides. With some of those ideas, technology capabilities brought in most more of that social act that social activity will help encourage a more strategic connection between knowledge and infrastructure (KI003).

- I believe a cellular network that can sustain the usage within an enterprise. It is important to have proper technology throughout the casino and hotels, but if we lose the cellular network, the operations will cease, and millions of dollars will be lost. This could significance cause loss in many ways (KI006).

- One of the things that I was able to employ when I first came on, was very low technology, you know, a couple of DVDs or a couple of YouTube videos about the tribe in particular and some of their beginnings. I would love to see or consider updated technology that provides a state-of-the-art experience. Those who would be building the knowledge infrastructure should consider, virtual reality opportunities to be able to virtually interact with some of the things that we don't always get to see if we've ever been up to some of the larger buildings on, on the campus. You see artifacts; you see paintings; you see things that have been built by hand. And while we do see those in some of the videos, I would love to see people be able to interact virtually as part of exploring some of that culture. Also additionally, some of the things that we won't get to hear publicly, like, particularly bird singers. Thinking of the pandemic; there are many things that we don't get to do or get to participate in because of being behind closed doors or avoiding too many people. I think some virtual, virtual reality options might be nice to hear and see those pieces of various tribal cultures, philosophies, and traditional knowledge (KI008).

- When you're looking at technology, for you to have proper knowledge infrastructure being built, you will have to have servers. So, for example, if a sovereign nation is looking to archive its culture and language tradition philosophies, it must need technology to preserve that. So, they have servers that would, in essence, be able to store that information for future generations. Other technologies that potentially can be utilized, such as that cellular network, for even you and I to be on, the current zoom call, there has to be proper cellular infrastructure for technology to be able to, to work, but also to be able to connect others (KI0009).
  - I believe that a proper cellular infrastructure is needed to be able to support new technologies and for that technology to sustain itself. Recently, our tribe embedded a new cellular infrastructure because tribal members couldn’t make cell phone calls on their reservation. That took 35 years. I worry about the nations that don’t have money to be able to build that. I also think that virtual reality would be able to help show the greater world about the nation, and this may draw in the
support they need to build knowledge infrastructure. If a developing nation could "go live" and show parties willing to donate, they could find the funding without relying on the federal government. I think of a site like GoFundMe that could draw in donations and companies that have to develop the technology. Everyone could help; the tribes need a secure platform (KI0009).

- Obviously you know, a sound WIFI network, is a crucial component to an established communication network is going to be pivotal, but I think having like an information archive, and what that would be is a, a resource docent that those that work for the enterprise can look at some of the docents of, of their government, right. Some things and cultural assets, almost like a library, are virtual. And then what that would do is, would, that would provide the opportunity for those that want to learn about it, to understand their journey, the things that you're not going to find in history books there, they know their history, right? You can provide that history or access to that kind of knowledge is powerful because they have the opportunity to educate in real-time (KI0010).

- I think, you know, video capture technology like Zoom. FaceTime that way, you can see the individual on the other side. I think if the infrastructure was set up to where it's only audio, we're losing, we're going to continue to lose the next generation artifacts. Hence, it appears to me, in my opinion, that the younger generation is growing up as more visual and somewhat auto-reliant. They want to see it. And, with that, you can have a phone call between people, but it's not quite the same as seeing their faces and reactions. As I say, a picture is worth a thousand words. FaceTime is worth tenfold because you see the emotion, and you're truly making that connection as best possible to understand and build that relationship (KI0010).

- I believe any department that provides internal services that align with organizational structure, the culture, any form of information sharing, and technology. I would even say any department that has to understand the physical environment for sustainability is probably a department that comes to mind. More specifically, maybe like our cultural resources team or education can help digitize all of the knowledge from their respective tribes. Let's say we're moving to something more specific, like information technology, which will affect house system operational infrastructure if infiltrated. Technology is great but needs to be encrypted. I can think particularly of our environmental department, which essentially likes geographic information systems. They contribute by doing outdoor mapping of the landscape of our tribal regions. And I guess they can transition that into the revenue-making part of the enterprise, where they can, assist with things like finding, finding slots, and stuff (KI0013).

- I think that overall, social media should play a great part in the spread of ideas and one of our current tools. I think the modern age is very interesting right now. It's like quick videos; that's how people are spreading information. They want to get on TikTok, they want to get on Instagram reels, and they want to see something quick and fast and full of information. I think it's a requirement to understand how the world sees and accepts information in the current moment so that you can mimic the structure to deliver codes (KI0014).

- If there's a cultural center, maybe they could have a hologram type of experience there that could, I don't know if you could, I have no idea if it's possible, because again, I'm not super techy, but if you could, be able to transmit that experience on a different location, would that be possible? (KI0015).
I have seen indigenous people, themselves essentially become influencers with the use of social media… whether it's someone who is regularly educating about certain dances and songs, they inform their narratives (KI0015).

One of the biggest things you hear about right now is TikTok because it's a place for funny videos and some nonsense, but also a powerful education tool (KI0015).

Twitter is one of the first places I go if I think there's a fire nearby or if I have heard, or something happened, but I am still waiting to see a news story on it. That's usually the first place where people talk about it. So, you know, or you think about how much social media is, playing into the education outside of that nation. You know, a hundred percent that social media is a big part of technology that helps educate people regardless of the content (KI00015).

Well, I also I think of is computers and cell phones with Internet access because that allows for meetings like Zoom meetings like this, or if someone doesn't have a laptop, but if they have a smartphone, you know, they could attend a meeting that way or have access to electronic information (KI0015).

The next item suggests that technology could help tribes by making indigenous knowledge available so that constituents and stakeholders to find information accurately and quickly. Technology provides individuals with easy-to-access information, accelerated learning, and fun opportunities to practice what they learn.

II6: In what ways do technological advancements support indigenous knowledge?

Responses included:

• Undoubtedly, in many ways that we as a society have yet to identify, but there are some existing ways that we know of now. What you and I are doing right now, meeting virtually, is close to a game-changer in that it provides access to tribal nations to outside educational sources and outside lecturers. Before, a classroom of youngsters on a tribal reservation needed to learn about a particular subject, maybe relating to tribal sovereignty or some other topic. They would not have the same information at their fingertips. Still, the fact that we are now quite regularly and with ease like we're doing now can bring in outside speakers, who have experience in these important fields that I think is useful in ways, which we're only beginning to understand because as you know, so many of our friends in Indian country live on reservations in quite remote areas. And so, because of still poor infrastructure because of their location, which is quite separated from in our country, it's difficult for them to gain too many of these people who may have important knowledge to share. So, this broadband access is, and I don't mean to sound like I'm exaggerating. Still, I do think it is an important human right to access broadband because it certainly can provide opportunities for tribal educational programs to connect with needed resources, needed knowledge infrastructure (KI001).
• I mean with, you know, having the internet access to internet and cell phones, that's just used every day like it's used for everything in today's world, and if they don't have that, then that's a major resource that they're missing on, and they can't use that tool to spread knowledge and meet with other people virtually even, you know, if they're doing distance learning, then they can't participate in class discussions and share their experiences with their classmates. And yeah, even the local sovereign nations they're successful because they have invested technology to advance their nations. And I had a zoom meeting with a tribal member once, and the zoom kept going out and, yeah, it's just, their reception is just because they're on their land (KI002).

• Yeah, of course. Zoom has been very beneficial. The reservation, which I currently work in, I mean, they've expanded to a fiber network. So definitely the basis is there to utilize technology, but maybe something more off the grid would be beneficial, you know, in case of anything (KI004).

• I think this is a good way of like archiving history almost just to say, this is how our reservation used to be if they need to have information on, I don't know, like earth movements, just for future building of their, you know, planning of their homes in the reservation. I think that's something that they're using they could use about like the geographical systems. I think for knowledge infrastructure to be built will require such technologies, just because it's the only thing to think of right now, you're able to capture the present for people in the future (KI005).

• Yeah, I think there's a big push right now with data sovereignty, where, you know, a lot of the technology at advancements and so on are coming. Tribes could have the right to access your information if they make themselves self-substantiality. This new concept called data sovereignty, where it's like we warehouse our data. And, and I think, you know, as we think about, you know, indigenous knowledge, how are we going to protect our data, but uphold our systems and our new technological advancements. And again, tribes have a bad history where they had a lot of bad interactions where they've shared their information with the world, and it's been used against them. That's why, I think with the technology advancements that come into these tribal enterprises, many tribes are very selective as far as what, whom they work with and what software they bring in, because again, unfortunately, they've been used in bad ways"(KI0011).

Indigenous people have deep local, spiritual, and traditional knowledge that can support socio-cultural sustainability and natural resource utilization. The next item suggests that enterprises owned and operated by sovereign nations provide awareness of their history through events and orientations. The focus has been primarily on empirical and practical knowledge, philosophies, and how they can be used and managed in ways that provide spiritual support for tribal communities. This interest has come at the expense of a deeper understanding of the
epistemology of indigenous knowledge. The social, cultural, and economic circumstances in which such knowledge is applied are of keen interest.

Employees described their view of their enterprises using mostly favorable terms with words like generous or strategizing for the future and wellness. Of the ten employees who stated that generational development is needed whereas Tribal Members/Community Members used positive words to describe generational advancement by creating an archive within a cultural center. The next item identifies that generational advancement involves defining and adopting strategies, structures, procedures, and technologies to handle changes in external conditions in the environment. By establishing a cultural center, sovereign nations can highlight people from their voices.

Responses included:

II7: What is the role of indigenous knowledge in enterprises owned/operated by sovereign nations?

Responses included:

- Well, I think it's a combination of reconnecting with their heritage, and their past has a strong outreach program to elders; elders play a critical role in this. And also, when appropriate, consult with outside scholars and outside educators, some of whom might be tribal themselves, some of whom may not be, but who nonetheless have experience in what we would more broadly call Indian country or Federal Indian policy, if you will, who have experience working with tribes that I think would be a good start. So, involving tribal elders is paramount and tapping into the know-how of outside scholars is not for nothing. Still, there is any number of good former government officials who may be served in a prior administration's bureau of Indian affairs or perhaps maybe even worked in a state-tribal office because many governors, state governors, these days have an office of tribal affairs tapping into their knowledge and their experience, I think would be very beneficial. They certainly will bring perspectives. That can be useful (KI001).
- My current enterprise has an actual cultural department that teaches the employee's language and philosophies. Like we get to learn words. We also are immersed, at least in my role. I'm not sure everyone else is, but I know that within my role, I dive and download by topic because of what I do and my connection to working with that part of the enterprise. So, I would say the only thing is language outside of that. There's no huge immersion in breaking down cultural things all the time. Still, we do have a magazine,
and people can see that happening within our magazines’ not like historical data or things to break down and help us understand the culture, but you can see what they're doing. And sometimes, with some of the magazine articles, you can deep dive into particular areas that are fully culturally based. So, I would say through the magazine, through the access to learning the cultural language. Still, I could see us probably, now that I think about it and talk about it out loud, probably implementing something that is a little more front-facing and more direct. I think the actual name they've changed there; I don't know how much I give away. They've changed one of the like main buildings that they're known for, throughout the public, to their culture, undergo changing their name (KI006).

- I think it is important to know the tribe you work for. I often think, like the coworkers I work with, forget that because of the different entities within the enterprise that aren't tribal, if you will, like on the business side of things. So often, it's easy to forget why the tribe is doing it in the first place. Their role is to educate the general public, their people, other nations, and society about who they are and what they represent. And again, I've been afforded the opportunity of literally needing to memorize all of the tribal initiatives and missions, and values all the time. So, it's like what I do and the role that I play, but I don't see that in everybody else's role. And I think it, if, without you understanding the culture, you cannot give true service to the enterprise or tribe because I feel like working for indigenous folk and a tribal entity is completely different from anyone else. It's highly mission-driven. It's very focused on culture and people. And if you don't have that deep dive and understanding of what that culture is, and you can't even, how can you be of service to the best ability. You don't want even to do something that might not align with their deep beliefs because of the history or, you know, things that impacted them wouldn't align. And then, of course, like a lot of their success, it is due to their culture and how they do things and business. And if you don't learn how to move in that sense, that can stall the enterprise's success as a whole, because you're not even connected if you will (KI006).

- I think also considering arts and artifacts, I think being able to interact with those who know and understand them, like you said, like language in the restaurant, part of the virtual reality experience would be hearing and virtually seeing someone who could speak the language, who could demonstrate how to make a basket or how to harvest them, display certain things that might have gone on culturally before the tribe was on the reservation or as they started to settle into life there (KI008).

- I say indigenous knowledge plays a role because everything we do can revolve around it. I saw a candle in one of our shops called sacred smudge, the names of the restaurants, and even the products we sell at the casino. And I know that smudging is something Native Americans can do before going into a meeting to, you know, have a clear mind going into it. And even the candle had written on them that it's to clear negativity. So, it plays a large role because Native American culture can be incorporated into many aspects of the enterprise. And it can allow guests to learn about Native American life; without the employees having that indigenous knowledge, there wouldn't be that special touch tied back to the tribe. So, we products that have a deeper meaning (KI008).

- 100% team members should know when you work for a tribal nation you're working for a different government and understanding their culture. They may have organizational practices that go against standard business practices. And understanding that there will always be a disconnect if they don't understand why things are done the way they are.
And if it has cultural significance, understanding that gives the employee, that much more information to better understand work within the confines of the enterprise. The role of indigenous knowledge is supported by that tribal nation and supports that tribal nation under the understanding that it is, is so critical for everything to understand, to be able to modify practices, to use creativity that, that these employees come from so many different enterprises that they have an experience that, that the tribe may not have. And I think the melding of both provides a greater opportunity for success on both ends especially when acquiring the role of educating communities (KI0010).

- The reason I feel it is important for tribes to help inform employees who they are employed by is simply the fact that the one they're the ones that count on you to provide a daily effort. The role also creates an opportunity to learn a little about who they are and why they are as successful as they are. Simply the fact of knowing just by knowing who they are makes employees feel that working hard, and I owe them by allowing me to work for them (KI0012).

- Indigenous knowledge needs to be preserved better within our enterprise and thrive. We don't want things to get lost. We want it to be able to be shared, so archiving would be a great step. Because we've already lost so much in the past, I don't want to keep seeing it happen. And I think it is important to come straight from an appropriate source. So, if I want to learn about a culture accurately, I want to hear it from the people within it. So, indigenous knowledge within a sovereign nation needs to be held because they're the right people to get this information from in the first place (KI0014).

An enterprise with a positive knowledge-sharing culture will see efficiency gains and greater innovation capacity, among other benefits. The next item identifies the challenges of learning and development as roles in enterprises, concerns of limited availability to training, limited time to train due to the environment of being fast-paced enterprises, and overall uncertainty about their status within retention being very low. To improve the knowledge and abilities of the entire team, enterprises communicate information, documents, and best practices among themselves.

II8: Why do you think knowledge sharing is essential for enterprises?

Results included:

- I think it's critical for the survival of a people. You want to pass down learning from one generation to the next, and that's one of the reasons that Native Americans have been so resilient. If you look at resilient civilizations throughout history, you think of the Chinese, the Jewish people, indigenous people in North America, and indigenous people elsewhere in the world (KI001).

- It's the way to grow. It's the way to sustain growth in enterprise if people are not learning, if people are not developing, if knowledge is not being shared, you know it goes back to the enterprise I worked in. I worked in it like we're successful despite ourselves. Still,
we're bringing in the numbers. So, a lot of the inefficiencies you can kind of hide if knowledge is shared to create better policies, process, and workflows (KI003).

• I mean, you got to understand what you're, what you're working for, whom you're working for. As I stated before, it gives a little more meaning. I think they could emphasize that more, you are working for, for a tribal government, you are helping in the sustainability of the tribe. It gives it that extra, meaning, but of course, other aspects come into play, you know, people have concerns about, you know it wages and, and their benefits. Other factors play into it. If they cover those bases, they could, you know, move on to these things that it's, indigenous knowledge that it's, it's new to many people. I mean, it's, to get them to grasp and, yeah, people would, further, expand their knowledge on that (KI004).

• Oh, cause you to need to be able to make sure that everybody knows the same thing, to have the same standard, quality, and way of doing things. If I know something more than another employee, and if I leave, that knowledge is lost. That knowledge is gone from the enterprise (KI005).

• It's like anything; it's an oral tradition. Again, it's that part of connecting with and sharing the story. And when people can share this story, it gets sometimes colored a little bit with their passion, but the story remains, and to be able to share the story and grow enthusiasm for it, that's critical. It's so important. And the people, as I said, the people who want to be within the enterprise and who want to work there and who have connected with it, will talk about it. They'll share. It's the same principle when you go to a good restaurant, and you're like, oh man, it is so good. What do you do? You tell everybody, right? You get on your media, you call, and they say, Hey, what'd you do last night? I went to this fabulous restaurant, and they shared and talked about it. It's the same principle (KI008).

• Because nobody knows everything, right? And then, the first person that says they know everything, they're not being honest, and they're not a leader; their egos are way too big. I think you have to have an almost shared nexus of knowledge that everybody should have access to, good, bad, or otherwise, on certain levels based on positions. So, what it does is it provides an area and opportunity to research to make it easier. So it's, it takes less time for me to be able to go out and something, if there's resources that's readily available, that I can access and do my own research and potentially development and come to the solution to save me time, effort and energy, every enterprise is, should be constantly trying to make processes more efficient, reduce costs, make people more proficient and drive more revenue and if you had a nexus of knowledge with processes, you don't know if some, if, if somebody has a key for a lock that you, that you've been struggling with, or your team's been struggling with, but if it was, and you could go in there and do some key term search on it and have a search engine, you can start pulling up resource documents and start looking for answers and, or potentially find the authors of those documents and go right to those individuals that would that might be able to provide insight on a problem or potential solution to an issue that, that the department or the team member is dealing with (KI0010).

• I think knowledge sharing is very important, especially right now, because I think there's a lot of different tribal enterprises that are getting into new things, right? And, and with that, other tribal enterprises are following that same path. And you know, we want to make sure that all tribal enterprises are succeeding over time and so on. And I think that knowledge sharing path exists, you know, because if someone shows up and they pay the
way for you already, why not take the easy road rather than build a new one? And again, it's to give, upper hand to other enterprises, so they can also be even more successful when they show up to the playing field. Because again, someone already passed on the, you know, the best way forward, with these things (KI0011).

• I think primarily for risk aversion procedures. I think that if you're sharing knowledge, you can be consistent and also spend fewer resources, spend less time on processes that have already been thought off, like the idea of, why reinvent the wheel, right if you can take from previous practices and elaborate and redefine each time (KI0013).

• Because everyone does everything differently. I very much support the spread of ideas. If something is, if knowledge is sensitive and private, then that's one thing that needs to be respected. I know that there are aspects that of, you know, multiple things across the world within cultures and religion, there are parts that they want to keep to themselves for privacy reasons, and that's supposed to be respected. But the knowledge meant to be learned for the betterment of a community should be shared. And I believe there's a corporate responsibility to improve the world around them. And that includes sharing culture with others to be exposed to and understand. Just know that this is a very different world. Everyone is different from one to the next. And to live helps people live more in harmony and get out of their comfort zone, know that there's more in their backyard than what's right there in front of them (KI0014).

• “It puts everyone on the same page regarding awareness, but it's important” (KI0015).  
• “Communications has always been important to me because I want to know, you know, things. I want to know what events are happening or what programs are available so that I can take advantage of them” (KI0015).

Transferring implicit (undocumented) and explicit (documented) knowledge from one person to another is known as knowledge sharing. Sharing knowledge inside an enterprise boosts output and gives workers the tools they need to do their duties successfully. The next item suggests that knowledge sharing builds more innovative, creative, and better-performing teams. The problem is that sharing of knowledge is that it is not available as well as it should be. With a third of participants rating their knowledge-sharing culture as average, employees are not within a framework that emphasizes the understanding of cultural characteristics and expectations, individual and interpersonal understanding of cultural characteristics and expectations, individual interpersonal and team characteristics, and motivational factors.
II9: How does knowledge sharing impact the growth/sustainability of the enterprise?

Results included:

- These groups of people go to great lengths to educate their young to pass down that knowledge from generation to generation. If there is an interruption in them, then it's a real crisis. And in an existential threat to that people and despite all of the odds against Native Americans and how they've been targeted for destruction, frankly, let's, we can't sugarcoat it. They're still here and in, in many ways, in so many ways, they're, they're thriving now, despite the challenges which we know about, but that is because through grit and determination and a tradition of passing knowledge down from generation to generation, that that I think is, is critical (KI001).

- The enterprise I work to is I work for a link to tribal gaming which is, you know, is in many ways the, the reason for the success and growth they see. Foreign entities are always posing a threat to sovereignty. What if California legalize mobile gaming tomorrow? Do we have a workforce to target this new demographic? Do we have a leadership population that's ready for that challenge? And the only way they can do that using that resilience is through knowledge sharing and continued growth. And again, going back to preparing those future leaders for what the future holds and developing grit. Like operators, strong operators need to have resilient grit, and you learn that through that knowledge sharing through that continual growth. And, so yeah, I think it's essential (KI003).

- I think it impacts it a lot. If there's no knowledge sharing, if you don't transfer the information from, one employee to another, or tribal member to others, eventually you're going to lose some thought processes, some good like skills, and it's not, it's not going to come back. It's not something that you could hire back because some people retain things better than others. Some things cannot be transferred, and it will be a loss for tribes when they lose that knowledge. Cause sometimes they will lose it forever (KI005).

- I think it creates a certain amount of buzz. Being able to talk a little bit about, the things that have been important to the tribe or the sovereign nation historically creates a little buzz around it. I also think that it can, it can grow curiosity and a lot of those types of businesses, it's all about people satisfying their curiosity and saying from this knowledge that has been shared from the things that we know to do, I have been able to prove for myself, you're going to have people, who are skeptics. It can't be that great. Somebody shared the story with me. It can't be that great. Let me go find out for myself, somebody who says, I thought this might be great. Let me go and try and prove it (KI008).

- It's not just sharing within the enterprise; it's sharing that knowledge outside of it. And that allows people who are on the outside, looking in, to grow trust for, you know, these business owners who are based solely on, you know, whether or not they're a sovereign nation or, Native American tribes. Sometimes there's not much trust. And sometimes there's, it gets passed off. It gets brushed off as, it's a fluke, you know, they've had some limited success sharing that knowledge can break through that barrier. It's not just limited success. You know, here's the history, the path, the framework, and you can see why this is successful now, and it should be successful in (KI008).

- Well, it gives you people a better understanding of what the enterprise is, emphasizing. Right. I think it is beneficial. People want to see that; it differentiates tribal businesses
Many people worldwide view the application of indigenous knowledge as an alternative strategy for fostering development in underdeveloped rural areas. The next items makes the argument that, based on a survey of much recent work on indigenous knowledge, several issues and conflicts have prevented indigenous knowledge from serving as many purposes as had been anticipated or assumed.

II10: In what ways does the employee training include aspects of indigenous knowledge?

Results included:

- Employee training has universal applicability. So certainly, I think employees of tribes ought to learn about that tribe's history. I think they ought to learn about that tribe's culture and tradition. I think employees of tribes to know the basics, they didn't be experts, but they should know the basics in terms of what tribal sovereignty is and why it's important. And they should have a general outline of the history of indigenous peoples in North America. The good and the tragic will make them more informed employees, more aware (K1001).
• “Yeah. In my onboarding, I got a quick rundown of who the tribe are and what their history is” (KI006).

• I think the materials for the training, as well as those who are doing the training, can speak to some of the things that make the enterprise, which is the story and the history of the tribe, and you know, them as indigenous people and be able to liken that back to whatever the training might be. I'm not saying it will always be present in technical training. You know you don't need to know the story of the tribe to be, to learn how to sharpen knives at a restaurant or stack up a cheeseburger just right. You know, in one of the, in one of the food outlets, however, as you, as team members, are onboarding, as they are getting to know their department, as they are, you know, understanding what comes next for the enterprise, as they hear about how to get involved in and engaged in things that are, you know, sometimes even tertiary to, just the job they do every day, I think it could be layered in (KI008).

• The enterprise supports indigenous knowledge at the beginning when they first get hired, which is the orientation. Employees get the history of it. And so, they do, I think, once a year, and those opportunities are at events throughout the year. I think it's important because it would build organizational support. After all, you want to know. After all, you're working for, and you don't want to feel like, you know, you're just a number and the way the tribe is too kind of the way they, the value is part of the family. So, it's a good way to tie the mission, vision, and values we put in, although the side is different. We still tie in the values with the, and, and it's, it makes it easier to send out the message why we are coming in. It's good to know for them. And I also use it as part of my leadership. I use it in a way to help them. There are certain ways this, especially all that cut, cut off the time at one. So, then you have to explain to the employee, redo this because we, the tribe, care about the community and based on that, they understand that its school next to, so they feel, you know, the land is there still their responsibility (KI009).

• And I think that the way that they supported indigenous knowledge was through their onboarding process, where they gave, even though it was like, it wasn't an in-depth level of what indigenous knowledge would mean. It would still like to identify and validate tribal history and mission. And this way, you know, it can capture our mission as a team member coming to contribute to a larger enterprise (KI0013).

Participants stated that to be successful within a sovereign nation’s workplace is to have hard and soft skills combined with being diverse and empathic. Allowing employees to pursue reasoning in understanding the correct interpretation of an idea will promote knowledge sharing and competencies to be versatile in their roles. The next item suggests that skilling and upskilling employees will offer excellent opportunities for self-analysis. However, will need an operationalized learning and development strategy will need to be developed to align with business needs; This process can be time-consuming and frustrating for employees stalling the
growth of the enterprise. If the strategy is utilized, there will be a need to properly train and purposefully infer frailties that have occurred and how improvements can be made.

II11: What abilities and skills are required to succeed in a sovereign nation's workplace?

Results included:

- I think that it will take someone open to learning and understanding and being able to, while it's not their history, empathize and say, and adopt a certain respect for tribal, you know, history and knowledge is key. I think you've got to have people who are open and hardworking and willing to get on board and think through some of the things they've done in the past and be able to pivot and do it differently. You know, when they think of this particular enterprise, though, it is a thriving business, the foundation of who, the foundation of who we are is built upon that tribal history, that tribal knowledge. And again, some of the things that happen, red tape or structural changes, those look very different, you know, for a congregation. So, you've got to have people willing to pivot, learn and grow, be curious, ask questions, and not just say, ‘Oh, it's just another business change. And, but think through why sometimes things happen differently and at different paces than other kinds of businesses’ (KI002).
- I think the first and foremost is just that ability to have to understand that bigger purpose, right? You do have to be able to align with the values. Cause again, you know, a lot of the indigenous place and enterprise work, they're the indigenous people, they're not business operators, but the path they've taken have made them successful. They may not be those formal business leaders that you see, but they may be strong decision-makers, and the enterprise they've built, I have evidence of that. And so, to be successful, it's being able to embrace that right. To be able to align the decisions you make on a day and day out basis, and continue to think about how these benefits, it's not just the end, you know, end of the day of like, okay, am I going to make a profit? (KI003).
- “You have to be flexible. You have to adjust, you have to be able to if you know, something a way of doing something and that's not the way that the nation operates, you have to be able to” (KI005).
- Oh my God. You have to be patient. I think I see it often that people do not want to who are not indigenous. Don't want to get to know the culture in the tribe, and without getting to know them, how can you serve them? So, I think you need to be patient. I think you need to be flexible. I think you need to have compassion in some sense. It’s like empathy, where you know how to deal with people. Because it's a very, it's very interpersonal. And then you have to have wisdom. I think you also have to have a level of emotional intelligence, and then I think you also need a little courage because there will be times when you need to speak up and implement change. And there are times where at least in my role, I’ve seen because the culture is not used to certain things, but they want it and don't know how to get there (KI006).
- I think a lot of it right now is unique to today. It's unique to the current market. It's unique to the current climate. We have many people in the workforce who don't want to be no matter what, no matter where they are; they don't want to be there. I think there are sometimes times. Leaders in the business who, despite their best efforts, aren't able to
communicate that vision. And they're focused more on execution and operations, despite what is championed as part of our values. So, I think we've got some barriers there. I think right now, as a business, we're trying to do our best, you know, again, based on the market, the economy, just trying to do our best to keep things open and running. And so, a little bit, a little bit of that gets in the way of continuing to share the story. I think that's what happens. I think sometimes that's also why if things take a little bit longer to be implemented or done just with the tribe because when they see that, they're like, whoa, whoa, whoa, let's dial it back. Let's not forget where we come from. And let's reestablish that, or, you know, refresh that with those who work here (KI008).

- I think getting on board with someone else's story is important. I think that's going to take someone open to learning and understanding and being able to, while it's not their history, being able to empathize and say, and adopt a certain respect for tribal, history and knowledge is key. I think you've got to have people who are open and hardworking and willing to get on board and think through some of the things they've done in the past and be able to pivot and do it differently. You know, when they think of this particular enterprise, though, it is, you know, a thriving business, the foundation of who, the foundation of who we are is built upon that tribal history, that tribal knowledge. And again, some of the things that happen, red tape or structural changes, those look very different, you know, for a congregation. So, you've got to have people willing to pivot, learn and grow, be curious, ask questions, and not just say, 'it's just another business change. And, but think through why sometimes things happen differently and at different paces than other kinds of businesses' (KI008).

- I think some of the barriers are the fact that you know, these enterprises are going, are growing so big that even some of the tribes are also, forgetting about, the indigenous knowledge. And again, as the law has, many enterprises are becoming much more sophisticated and growing. You're starting to see that the last thing folks are talking about is, there the indigenous knowledge, we're just embracing the new business, the new business environment, that's just who we are, if we want to be successful in the business or in the open market. We got to act like a corporate entity. And again, when you're working for a tribal enterprise, that shouldn't be the mentality. I think that's what's limiting, the fact of this indigenous owners because, the owners are also just disconnected from this concept of indigenous knowledge (KI0011).

- I think that applies to anything with the same skill sets and the same abilities to succeed outside. I think the only the real difference is the understanding and, and the initiative to dive into working for a tribal nation because there are some things be because of the relationship federal and because of the relationship via state that they don't think it, it might apply. I think the tribes educating the team members so they can have a clear understanding of the uniqueness of working for a tribal enterprise is, is pretty paramount, I think adaptability is critical for anybody, but more specifically in a tribal nation, because they could come from an enterprise that does things this way. They could be very proficient, high performance. They're getting that, but if they come to a tribal enterprise and because of something about their culture, depending on that tribal nation, they may not be able to do that because of their history and their beliefs that adaptability would have to, they say, 'Hey, I've got to adapt to this new culture and get away from what I've always done. And they must be creative to still drive the performance with a different way of doing things. So, if they can't adapt, they won't be successful (KI0013).
• I think just being yourself and having that genuine thirst for understanding what sovereignty means, to understand what community is. And I think the tribe does a very good job showing that to their community and surrounding environments. So, I think those are the two qualities that I would home in on. I think that it would be more so understanding the culture between the casino side of the enterprise and then the tribal government side because of the division of work, the hours being spent from one side to the other, may defer. So maybe individuals working in the casino may not have the same opportunities. And if not, and it's not necessarily because they're not being presented with the same opportunities, but because the scheduling doesn't allow for them to be able to also, either give back to the community along with, tribal leadership or, or maybe attend, some sessions. Right. So, I think, maybe the opportunity for education is what we can benefit from (KI0013).

• You must be adaptable; it moves fast most of the time. So, an ability to be flexible and being able to multitask and have a positive attitude while all of the moving parts are going on helps. You also need to have good time management. The ability to go from one thing to another, not being afraid to, and help out by stepping in are needed qualities” (KI0015).

Adult learners are motivated to learn things that will help them better understand and do things in their role. The next item identifies that sovereign nations have positioned themselves to work within strategies that progress away from barriers. Enterprises can provide new concepts and skills as soon to encourage a learning culture where information is available for employees to transfer their learning to the workplace.

II12: Identify barriers that prevent employees from acquiring these abilities and skills.

Results included:

• Well, I mean many tribes, not all, but many tribes, are beset with health crises. I mean, there are tribes that we were aware of who sadly still do not have access to clean water or safe infrastructure where their roads badly need repair. They're unsafe, where you have many accidents on reservations, people get injured, and there's no good health or healthcare access. So, people die. The median age is it people dying in their fifties with those types of challenges. It's difficult to lead a life of happiness, and it's difficult to thrive because you're dealing with such basic survival issues. So those things get in the way. And another thing that would get in the way is if tribes are unable to navigate the, let's admit it, it's a complicated maze of government so that they can have those good and productive relations with Washington DC, where they depend for their healthcare where they, some of them depend for grants (KI001).

• I see that in the establishment, we have, there's a lot of different diverse people, so it's not like we only hire people who live here. There are many immigrants as well. People whose English is not their first language. So that could be a language barrier and many
different education levels. I think that could also be a barrier. You know, there is a
language barrier, and many we put out communications, it doesn't mean everybody
understands it right away. Different shifts, that's for sure. Just because I work in a 9 to 5
shift, information could be sent to me, but it's not going to be given to somebody who
works in like a graveyard shift (KI005).

- Traits are your signal. I would say, I mean, one with their background, but once it's
identified that they don't have these traits, one of these barriers they would face is access
to it. So, if you are, if you don't have a boss that is willing first to recognize their team
and see that some people need to step it up and change their person, not their personality,
but the way that they move professionally in this environment and understanding if that
boss doesn't invest in, their people and giving them the resources to understand how to
move within the tribe. I think that's a huge barrier. I think that's a barrier that I have
faced. Luckily, I have a level of emotional intelligence and grit, and I care about the tribe
that I'm working for and what I do. So, I've had to go around my boss, but for someone
who doesn't have a boss like that, I can easily see them, dismiss or not having those
personalities like I do, dismissing it and going around it. So, I would say management is
big access if they don't have access to the information. I mean access like if they're not
allowed to go on certain websites to get that knowledge, if they're not allowed to have
certain technologies, that'll give them that knowledge. Suppose they're not allowed to
undergo specific training to acquire that knowledge. I would say those are the big ones
(KI006).

- I think, I think the biggest barrier is the individual. There are so many more resources
nowadays that are at our fingertips, right, YouTube; I have access to professors that when
I was going to school, I didn't have access to, but I can look up leaders and watch because
of the in internet and infrastructure, I can watch leaders, and I can extract their
information for my knowledge base. I didn't have that access go. The generation that has
come before me doesn't have that, but the generations coming after I do; I think the
biggest driver is initiative, motivation, and the lack thereof to have a sense of entitlement.
I think that our society has gotten too easy, and we don't have to work as hard for things
(KI0010).

- Not having the proper mindset, like always being like that. They're just there for the
money simply because they're there to collect paycheck. And that's it that I feel that if
you have that mentality, that you're just there for that, and not there to give a full impact
towards the enterprise, then that we're changed the whole aspect that, that makes you not
interested in what the nation has gone through and what accomplishes and goals they've
created to be what they are at a current level (KI0012).

- I think the barriers would very much lie within their characters such as the inability to
adapt a change or the refusal to accept other beliefs, others' customs and traditions. To
work for a sovereign nation is to know that many cultures exist to be seen and learned.
And some people, unfortunately, don't adapt to that. But it would be best if you had that
within your makeup is a barrier in itself (KI0014).

- “I would say that before new employees arrive where I work, they may not have been
taught 21st century leadership skills” (KI0015).
Most participants indicated that to build a sound knowledge infrastructure; there must be a technological network on reservations to ensure an active and solid connection beyond the reservation. Similar to a blueprint, there must be a mapping of knowledge infrastructure in how it will interact within the enterprise operations. Participants indicate that taking administrative actions to plan for building knowledge infrastructure is key so that sovereign nations can save on expenses. Yet, others indicated that socially preparing next generations will help key figures within enterprises’ have the needed ‘buy-in’ for the proper adoption of knowledge infrastructure, especially as there will be changes in expectations, responsibilities within some roles, and shifts to current workplace culture dynamics. One tribal citizen indicated that they would like to become an internal consultant for their enterprise if they are not elected to be on the Tribal Council, which informs decisions for the tribes. Another is starting other entrepreneurial ventures, and another is joining boards or task forces and pursuing the idea of becoming a learning enterprise within their reservation.

**Structural Themes**

Five structural themes (T) were created based on the participant response due to the analysis and inter-rater validity. Participants shared their experiences in knowledge archiving, community building, generational development, self-development, working to develop employees and tribal citizens, and accomplishing enterprise business goals.

- **T1 - Archiving knowledge:** Participants stated that archiving indigenous knowledge is one of the most important aspects of actions, processes, and practices for proper establishment of cultural and political sovereignty.
- **T2 - Building Community:** Participants state that building knowledge infrastructure would aid indigenous communities in realizing how planning and tribal procedures must
be integrated into community building to sustain tribal objectives and activities and safeguard and improve the advantages of their tribe.

- **T3 - Engaging in Self-Development:** Participants also disclosed that self-development is necessary for fostering employee awareness. Participants discussed how they felt about developing their sense of self-worth, growing personally, being more real, having less rigid belief systems, and being open to changing their ideas.

- **T4 - Working on Employee and Tribal Citizen and Community Member's Development:** Participants also agreed that building knowledge infrastructure will improve the leadership skills of employees, leaders, tribal citizens, and community members. As a result, learning opportunities were seen as driving the development of fundamental knowledge within the context of leadership development.

- **T5 - Achieving Enterprise Results:** Participants talked about their feelings, attitudes, and assessments of the information's findings and business implications. Participants discussed various topics, including enhanced cooperation and teamwork, increased effectiveness and efficiency, accelerated organizational growth, enhanced culture, and enhanced financial performance.

**Chapter Summary**

Semi-structured interviews were employed in this research, which had a qualitative research design and a phenomenological methodology. The study's data were gathered by interviewing 15 participants who had been chosen using the snowball sampling method. The study’s problem statement, purpose statement, and central guiding research question guided the development and execution of the study methodology and analysis. This chapter encompassed and detailed the findings of the study and how sovereign governments engaged in knowledge
exchange are also interested in enterprise results. Analysis of descriptions and themes identified five key themes. Each of the five themes is revealed through textual and structural analysis.

The five themes include archiving knowledge, building community, engaging in self-development, working on employee and tribal citizen development, and achieving organizational business results. Data were collected to address the original research question, which was later transcribed and coded. These codes were analyzed by researcher. Research Question (RQ) 1 asked to what extent knowledge infrastructure might support generational advancement through learning and development programs within sovereign nations. The characteristics of enterprises owned and run by sovereign states were positive, logically, and realistic, depending on participant demographics. The interpretation of the data and any implications for future study, as well as the implications for creating a knowledge infrastructure, will be covered in the next chapter.
Chapter 5: Discussion

Chapter Overview

This chapter provides an overview of the findings of this study and interprets those findings within the context of the study’s problem statement, purpose statement, research questions, and methodology. The descriptive phenomenological analysis revealed key aspects of the lived experiences of individuals affiliated with sovereign nations. This chapter fully explores how these findings answer the research question will be discussed. Section headings for this chapter include the Study Overview, Discussion of Findings, Conclusions, Implications for Policy and Practice, Recommendations for Further Study, Researcher’s Reflection, and Chapter Summary.

Study Overview

This descriptive phenomenological study aimed to explore the significance of building knowledge infrastructure in sovereign nations by examining the lived experiences of sovereign nations aiming to drive knowledge sustainability and advance generational knowledge from their tribes and business enterprises. The study intended to examine how knowledge infrastructure could be built for future generations.

The research question that guided this inquiry was, to what extent might knowledge infrastructure support generational advancement through learning and development programs within sovereign nations? This study addressed the lack of building knowledge infrastructure in sovereign nations. The lived experiences of the study’s 15 participants describe the elements and outcomes of some of the challenges found with sovereign nations and their business enterprises. Such accounts highlight similarities and contrasts that can be examined in the context of the research question.
Discussion of Findings

This research investigated experiences with sovereign nations and barriers employees face within their business enterprises. Fifteen participants were selected through a snowball sampling method; six were male, and nine were female. The participants had over 130 years of serving sovereign nations collectively with an average of 15.3 years serving sovereign nations individually. Of the participants, 70% were of indigenous descent, 65% worked as executive-level leadership supporting business enterprises owned and operated by sovereign nations, and 60% worked for tribal governments. Participants represented diverse sovereign nations, with 65% residing in the southwestern region of the United States and 25% located in the midwestern region of the United States. From the 15 participants' interviews analysis, the researcher identified six findings (F).

- **F1 - Advocating Generational Advancement and Vision:** Providing opportunities to advance will help sovereign nations accomplish their tribal goals and will serve as a guide to the operational process of building knowledge infrastructure.

- **F2 – Historical Trauma of Indigenous Americans:** The traumatic events suffered during previous generations creates a pathway that results in the current generation being at an increased risk of experiencing mental and physical distress that leaves them unable to gain strength from their indigenous culture or utilize their natural familial and tribal support system (Big Foot & Braden, 2007).

- **F3 - Conducting Professional Development Through Training:** Professional development training helps develop capabilities in the participants to create a better employee experience.
• F4 - Technological Infrastructure: A broadband cellular infrastructure will be required to build knowledge infrastructure.

• F5 - Knowledge-sharing: Knowledge-sharing invites a vibrant culture of creativity that can inhibit encouragement and motivation.

• F6 - Reducing Organizational Bureaucracy: To avoid restricting the flow of ideas throughout business enterprises, leadership will need to create buy-in at various levels of the hierarchy.

To better comprehend this phenomenon, the researcher used a Venn diagram to assess and conclude how the five structural themes connected from the literature and lived experiences (see Figure 10).

**Figure 10**

*Knowledge Infrastructure Venn Diagram*

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*Note.* Findings are illustrated within a Venn Diagram to illustrate connectivity by George Vigil.
The overall précis from II1 was about what employees in business enterprises would benefit from knowledge infrastructure being built. Eleven participants stated that all employees would benefit from the knowledge infrastructure being built. The participants collectively stated that leadership support is crucial to knowledge infrastructure as their buy-in would help encourage universal implementation. Eighty-five percent of the participants also indicated that management would benefit from knowledge infrastructure because it would help establish a learning culture that would positively impact team members as to the innovative environment of a workshop. By using pre-session meetings to determine the level of current leadership support, the facilitator was also able to gauge the participants' engagement levels before the start of the session. Overall, these efforts would help enable innovation without sacrificing traditions.

The overall précis from II2 was about enterprises supporting employees in building their knowledge of indigenous culture. Participants indicated that many sovereign nations use their websites to inform the general public of their indigenous culture. Sovereign nations host Pow Wows, a sacred social gathering held by many Indigenous American communities to meet and dance, sing, socialize and honor their cultures. Participants also indicated that their sovereign nations have a magazine to inform the public of their history and upcoming events. Participants stated that by building a knowledge infrastructure for future generations, indigenous knowledge must be integrated in practices and values in promoting socio-economic well-being and equity among global communities. Eight percent of participants state that indigenous knowledge can teach the broader world about protecting their environment. Participants stated that creating a sustainable knowledge strategy will require a vision, sound strategy, and a willingness to adapt to change. Participants stated that when enterprises take intentional steps to improve their communities, they prioritize long-term impact and its effect on the health and well-being of
future generations over short-term profits. According to one participant, successful sovereign countries seek to transfer their riches by establishing thorough and workable plans to assist next-generation family members in becoming accountable, knowledgeable, competent, and confident regarding tribal concerns. This work for tribal leaders frequently entails imagining the future roles their children might inherit or wish to fulfill about family business interests and then developing opportunities for experiential learning and career development to support their success in pursuing those interests.

The overall précis from II3 was about changing or developing current processes to sustain the creation of knowledge infrastructure within enterprises, seventy percent of participants was that there must be knowledge policies enacted to provide proper foundational support. Participants indicated that such policies would help constitute a crucial infrastructure that must be developed and strengthened. Eighty percent of participants state that there is a need to develop in the promotion of knowledge management and improve technological infrastructure. Forty percent of participants stated that current facilities should be upgraded and modernized so that constituents can keep abreast of the latest developments. Additionally, participants stated that there are limited resources for professional development training for front-line employees.

The overall précis from II4 was about what existing tools can aid efforts to build knowledge infrastructure. All participants stated that current hardware and software must be used to provide connections. Microsoft Teams, WebEx, and Zoom could be leveraged to meet virtually and in real-time to conduct business meetings, personal and professional conversations, and strategic visioning. During the COVID-19 pandemic, many sovereign nations leveraged these web resources to connect with businesses, families, other nations, and political leaders. Another tool that can be used is social media, as sovereign nations use this tool as a marketing
component to make the general public aware of indigenous history, traditions, and ventures. Social media can also provide a platform where leaders can speak live with the public. Another existing tool can be used in the world wide web, as it would allow sovereign nations to update their websites to showcase what their enterprises are working on.

The overall précis from II5 was about what new technologies are required for knowledge infrastructure construction. Seventy percent of participants stated that integrated artificial intelligence would be a great immersion experience for individuals to experience sovereign nations. The participants also identified that sovereign nations with business enterprises could create a culture; center and invite the general public to help convey their story and what they have overcome to have enterprises. Forty percent of participants stated that for new technologies to be implemented, there must be an investment in developing a better cellular network on the reservation as they have experienced weakness in bandwidth when making calls through a cellular phone or online.

The overall précis from II6 was about how technological advancements support indigenous knowledge; technological advancements support indigenous knowledge because they can amplify indigenous storytelling and voices. Fifty percent of participants' technological advancements, such as augmented reality, can help sovereign nation harness a role in cultural connection and provide their people with 21st-century skills. One participant indicated that one of the barriers to technology is data sovereignty. With the amount of information available and accessible online, data breaches will need to be considered when building knowledge infrastructure. As science and technology play a pivotal role in meeting economic, environmental, and social goals, technological advancement is acknowledged as among the chief drivers of the fast-evolving globalization process. Indigenous knowledge is a critical input for
global change and has played a crucial role in a country’s development - particularly in developed countries where indigenous techniques are still usually thousands of years later.

The overall précis from II7 was about the role of indigenous knowledge in enterprises owned/operated by sovereign nations; indigenous knowledge should be used to assist employees in understanding who they are and what their tribe stands for. Numerous participants claimed that many employees in their own companies did not comprehend the goal, vision, and values of the tribe they worked for. Since several participants noted that indigenous objects, languages, and stories are implied across some properties and periodicals, the function of indigenous knowledge should be present. According to another participant, the purpose of indigenous knowledge is to enable tribal people to support one another's businesses. A different training philosophy is needed to prepare a tribal member who plans to work in the enterprise and someday become a tribal leader than to prepare a member of the next generation who may not work in the industry but may become an owner or shareholder. Most importantly, if they want to be leaders in the industry, the future generation must also be proactive in determining their talents, interests, and career trajectories.

The overall précis from II8 was that knowledge sharing is essential for enterprises because it supports growth and innovation. Sixty percent of participants enhance the collective ability of an enterprise’s workforce to understand expectations, perceptions, and situations to make informed decisions. Participants state that knowledge sharing encourages transparency and creates a workplace where ideas are encouraged. Knowledge sharing allows for opportunities to archive and preserve best practices, experiences, and methodologies. Ninety percent of participants expressed that knowledge sharing is a key component of knowledge infrastructure as it allows the flow of knowledge to reach all tiers of the hierarchy. When teams share their
knowledge with other enterprises, they can more easily anticipate changes, make decisions, and pivot to keep in step with fast-changing markets.

The overall précis from II9 was about how knowledge sharing impacts the growth/sustainability of the enterprise; knowledge share impacts the growth/sustainability of the enterprise and can be a catalyst for collaboration and busting through organizational silos. Participants indicated that employees could find solutions faster and increase performance. Seventy-five percent of participants also indicated that with a knowledge-sharing culture, employees could learn what other teams have already experienced, work with other teams, and find better solutions faster. Participants also stated that with an increasingly hybrid and remote workforce and the importance of a knowledge-sharing culture, people have fewer opportunities to meet and share information casually. As a result, knowledge-sharing can prevent knowledge loss when employees leave enterprises.

The overall précis from II10 was about how employee training includes aspects of indigenous knowledge. Participants said that their sovereign nations do not have aspects of indigenous knowledge in their training beyond their new employee orientation. Several participants indicated that their sovereign nation offers programs that discuss tribal administration and gaming. Fifty percent of participants stated that their sovereign nations are working on developing training programs for their employees, so there is a better understanding of how the tribe invests in them. These programs will be delivered online to drive awareness, build skills, and deepen knowledge of Indigenous cultures for those who interact and prove self-directly and indirectly with Indigenous people.

The overall précis from II11 was about what abilities and skills are required to succeed in a sovereign nation’s workplace; participants indicated that the abilities and skills required to
succeed in a sovereign nation’s workplace are adaptability, patience, and resourcefulness. Employees must be ok with the unknown, as many processes take time. Eighty percent of participants state that employees must have hard and soft skills. Hard skills include project management and technical skills. Soft skills include active listening, emotional intelligence, openness to feedback, and a strong work ethic.

The overall précis from II12 was about the barriers that prevent employees from acquiring these abilities and skills. Seventy percent of the participants indicated that a key barrier that prevents employees from acquiring these abilities and skills is leaders not buying into training. One barrier to a knowledge-sharing work culture is when your employees hoard information and safeguard their knowledge because they feel the information is critical to their value and professional advancement. Another barrier identified by the participants is the lack of collaboration and communication between teams.

Conclusions

The definition of the “knowledge infrastructure” may be thought of as a continuum of knowledge that provides several tools and services designed to ensure the constant exchange of knowledge among all people (Little, 2017; National Museum of the American Indian of New York., n.d.; Peterson, 1999; Slawny, n.d.; Spilde & Taylor, 2013). For instance, when a sovereign country constructs technological infrastructure on a reservation, it is doing so to give tribal members the means of communication they need to function both within and outside the reserve and to be independent of the federal government. With this infrastructure, tribal members can continued to drive their commerce, communicate their culture and customs, educate the next generation online, and more. Identified below are the seven conclusions (C) that intersected the literature review and lived experiences:
• C1 - Application of Innovation Activities: By using innovation enablement activities, sovereign nations can help open participants’ minds toward understanding opinions and thoughts.

• C2 - Applying Vision and Objectives: Establishing a vision and objectives will provide sovereign nations with the goal of what is needed to be accomplished while serving as a guide to building infrastructure.

• C3 - Designing Around Tribal Culture: Incorporating tribal culture within the organizational strategy will create a more centralized connection in the employee experience and increase receptiveness to the business process, which may encourage higher retention rates.

• C4 - Establishing Generational Expectations: By establishing expectations, there will be a measure to institute behavioral protocols for employees to enable innovation.

• C5 - Feeling Safe and Secure: By providing a safe environment, employees and tribal leadership can express their thoughts without fear of judgment or repercussions.

• C6 - Promoting Diversity and Inclusion: By promoting diversity and inclusion of thought, there must be an aim to achieve knowledge of diversity from different backgrounds.

• C7 - Support of Leadership: Leadership must support employees by actively encouraging creativity, learning, and transformation by implementing strategic outcomes.

When a sovereign nation develops knowledge infrastructure, they create institutions like businesses, schools, programs, and universities to promote a learning environment where their citizens and staff can advance their knowledge and support the tribe's ability to be self-reliant and survive if their political sovereignty is revoked (Cook & Glass, 2015; Jehn et al., 2010; Jehn & Bezrukova, 2004; D. Jones, 1999; Light & Rand, 2004; Mezey, 1996; Milliken & Martins,
This study speaks to the central subject and aids in examining the need to create a knowledge infrastructure for sovereign nations and their commercial businesses. This research method offered the chance to assess the commonalities discovered throughout the coding process. Additionally, this strategy offers perceptions on prospected inquiry to increase generational knowledge.

If present tribal customs overlap the efficiency of corporate operations, more investigations should be done. Academic literature and organizational techniques interact to produce creative professional growth in an organizational setting. The ability to securely communicate ideas is the next important factor. To discourage learning from overcoming obstacles, the enterprise culture should promote responsibility, experimentation, risk facilitation, and strategic communication (D. Jones, 1999; Light & Rand, 2004; Peterson, 1999).

Focusing on the first category of evaluating the intersections of current organizational structures, only two practices were identified in the literature and lived experiences. Employees, regardless of position, should be provided training to help upskill them for personal and professional growth. Focusing on building people, we help advance the educational continuum for indigenous communities worldwide (Mezey, 1996; Milliken & Martins, 1996; Rooyackers & Verkuyten, 2012; Spilde & Taylor, 2013).

Centering on the second category of evaluating the intersections of knowledge sharing, only two practices were identified in the literature and lived experiences. There must be the continuous application of activities to help learners stretch their cognitive abilities to be able to process learning objects. While numerous creativity-enhancing techniques were mentioned in the literature review, there must be an overall purpose to drive learning interventions.
Conveying the third category, evaluating the intersections of indigenous knowledge, was identified in the literature review and lived experiences. Understanding what tribes stand for is crucial to expanding the diverse mental models' existence within business enterprises. By providing programs to inform employees of the tribe, clarification will provide key awareness for generating ideas and a new idea-generation process.

Addressing the fourth category of evaluating the intersections of technology identified in the literature review and lived experiences. Technology will help connect others and provide forums for knowledge sharing. By providing technology within sovereign nations and their business enterprise, knowledge will be a conduit that connects sovereign nations with other entities outside of the (Light & Rand, 2004). Opportunities will be presented as information can be archived, documented, and transcribed for future use.

Exploring the fifth category of learning and development identified in the literature and lived experiences. This was to establish current practices in learning and development to determine behaviors during the training of employees and what type of training is needed. Using this theme as a guide will help sovereign nations move toward generational advancement through the enterprise objective.

Reflecting on the overarching research question - to what extent, if at all, might knowledge infrastructure support generational advancement through learning and development programs within a sovereign nation? - the researcher has concluded that building knowledge infrastructure will take commitment, relationships, resources, and time. There must be a collective of intersections within an operation, organizational, and tribal strategies (Little, 2017; National Museum of the American Indian New York., n.d., Slawny, n.d.; Spilde & Taylor, 2013). This research provides insight that focuses on generational growth within sovereign
nations. The researcher’s position is that this scope is under-researched, and practices applied in each sovereign nation are not uniform and will still need to be added to academic literature.

Implications for Policy and Practice

This study intended to identify the elements and significance of building knowledge infrastructure. Several other implications were drawn from the findings as the elements surfaced through the study’s descriptions, findings, items, and themes. These include three implications surrounding sovereign nations, employees of sovereign nations, and knowledge sharing.

Implications for Sovereign Nations. Finding, developing, and retaining human and social capital could be beneficial for sovereign nations. For business enterprises, a scalable, more cost-efficient, and effective model could lead to faster and more productive learning and development programs (Cook & Glass, 2015; Jehn et al., 2010; D. Jones, 1999; Peterson, 1999). Such a development will help the current knowledge gap. By integrating programs into their talent management programs, enterprises could discontinue non-scalable coaching and training programs, reducing overall spending on leadership development.

Implications for Professional Counselors. Given the magnitude of the horrors committed against Indigenous Americans, it is conceivable that symptoms of historical loss may be transmitted to offspring via this pathway and may be understood when knowledge infrastructure is built in sovereign nations. This research will help professional counselors in their therapeutic practice and future research. It identifies that historical trauma exists and points to the importance of knowledge infrastructure as a foundation for preventing cyclical episodes of trauma from being transmitted amongst Indigenous Americans just like smallpox (Trusty et al., 2002). The findings presented in this study clarify one reason why some populations in
Indigenous American communities are suffering from such severe emotional, physical, and social-environmental consequences related to past traumas.

**Implications for Employees of Sovereign Nations.** A scalable professional developmental model could present tremendous opportunities for employees of sovereign nations. New programs and offerings will deliver to employees with greater impact, and lower cost as training will be developed internally. Adopting a new developmental model might also spur more innovation and research to revolutionize how sovereign nations operate for future generations (Briggs, 2005; Brody, 2021; Little, 2017; National Museum of the American Indian New York., n.d., Slawny, n.d.; Spilde & Taylor, 2013).

**Implications for Knowledge Sharing.** Indigenous knowledge sharing is a common way for information and history to be passed down from generation to generation in Indigenous American culture. A scalable model will significantly impact current knowledge-sharing avenues across the Indigenous communities. Indigenous knowledge sharing is a common way for information and history to be passed down from generation to generation in Indigenous American culture. For business enterprises owned and operated by sovereign nations, the most critical strategic objectives of sovereign nations, a new learning, and development model, integrating critical elements from diverse training modalities may enhance multiple theories focusing on minority advancement. While this study introduced the significance of building knowledge infrastructure, its principles may help define operational processes needed for its sustainability (Chandler et al., 2003; Little, 2017; National Museum of the American Indian New York., n.d., Slawny, n.d.; Spilde & Taylor, 2013). Specific organizational fields that might be altered or enhanced by building knowledge infrastructure include corporate training, global
leadership, human resources, leadership development, leadership learning theory, organizational behavior, organizational development, performance management, and talent management.

**Recommendations for Future Research**

This research revealed future opportunities to explore building knowledge infrastructure in sovereign nations. The first is due to the lack of technological infrastructure between sovereign nations in remote areas identified in the literature and those items identified by participants. Additional research is needed to determine why that gap exists. Several circumstances mentioned in the literature have prevented sovereign nations from advancing. Though there are several practices within sovereign nations, several have yet to be documented. The researcher feels that it is key to understand the importance of developing a business enterprise strategy that aligns with the vision of the tribe. It would be insightful to conduct a multivariate analysis to understand if building knowledge will help underprivileged sovereign nations can sustain their knowledge sharing. Lastly, there is greater insight that could be gained by conducting ethnographic research to identify if there are similarities in knowledge-sharing practices within business enterprises.

This research study employed a modified descriptive phenomenological approach by interviewing 15 individuals affiliated with sovereign nations. There are many opportunities to pursue more study, even though their emotions, perceptions, lived experiences, insights, and views undoubtedly have promise and could add to the corpus of literature. Descriptive statistics were not employed in this study, but such analysis might offer significant insight and provide a new dimension to the data and the findings. The following recommendations (R) for future studies could enhance or widen the study in several indigenous areas:
• R1: A study must be conducted to further analyze data and explore sovereign nations outside the mid and southwestern part of the United States. This study should explore the elements of additional lived experiences from a unified view.

• R2: A future study proposal should include how to comprehensively investigate the theoretical basis of historical trauma in Indigenous communities. This will contribute to the clarification of this hypothesis by giving studies an opportunity to connect knowledge infrastructure to identify how these traumas continue to harm and afflict Indigenous American people today.

• R3: Sovereign nations should archive their indigenous knowledge at the core of indigenous identity, culture, languages, heritage, and livelihoods to safeguard it through protected measures.

• R4: Sovereign nations should establish an education department within its governmental operations. This will be an opportunity to share innovations and practices developed in indigenous communities over centuries and millennia. Teaching tribal citizens in their languages and traditional ways maintains community culture and lead to economic growth.

• R5: Outside the existing data set, another accessible and natural extension of this study could be replicating it within a different population. The instrument and methodology have been established and validated. Therefore, the study could easily be transported to other minority communities around the globe.

• R6: At some point, to understand a broader context, elements, frameworks, and theoretical models, stemming from this research will need to be tested quantitatively. This could produce several research projects.
• R7: Quantitative studies could also explore differences between nations and their experiences.

• R8: Additionally, studies and research projects, both qualitative and quantitative, could be undertaken to develop a model that can be replicated across sovereign nations.

**Researcher’s Reflection**

This dissertation journey has provided insight into whom I have developed by the grace of God. Though challenging, I have found this journey significant to my growth. As I developed this project's scope, I wanted to be an active voice for advancing sovereign nations through knowledge. Jessen (2021) states that “humans were generating, transmitting, and applying information about the natural world long before the scientific inquiry was formalized” (p. 93). According to Atleo (2011); Berkes (2018), Indigenous peoples around the world have developed, maintained, and evolved knowledge systems via direct experience interacting with biophysical and ecological processes, landscapes, ecosystems, and species over millennia (as cited in Jessen, 2021).

Through the research, I found this journey enlightening because I have developed various leadership skills and was filled with many actions and learnings. Having experienced it myself, I realized that many sacrifices, constant pressure, and stresses are hard to surmount at times. With support, determination, and focus, I am committed to preserving and protecting cultural identity and sovereignty within the knowledge infrastructure framework. This project has allowed me to represent the many place-based pieces of knowledge accumulated across generations within myriad specific cultural contexts. Addressing the challenges of collaborative research with Indigenous peoples requires a much different social contract than with which many Western
scientists are familiar (Jessen, 2021). Cultural sensitivity requires that researchers employ “respect, reciprocity, confidentiality, and more” (Jessen, 2021, p. 100).

As knowledge infrastructure is being researched, the mass of research tied to Indigenous communities has been like the political sovereign and tribal gaming. As such, some research has been conducted, and the initial selection of articles for the literature review was insightful. Midway through the project, additional insight was provided during several guest speaker series. The key lesson that was learned during this process is that it was necessary to document and research areas on indigenous knowledge, loop learning, and organizational leadership. Second, it was found that if the researcher was connected to several indigenous leaders in various communities found within his professional network.

These connections created a snowball sampling method that helped produce the participant identification process. It was also uncovered during the interview that the questions about knowledge infrastructure and indigenous knowledge had to be defined before the interview. Lastly, it was found that leveraging my dissertation committee as consultants helped refine the questions to develop research outcomes better. This promoted the development of a Venn diagram, which captured the intent of the research, and the connection of the themes identified. While the original intent of the research was to develop a comprehensive list of best practices to build knowledge infrastructure, the committee's consultation brought to light an interesting element of this study that would compare the findings from the literature review and their connection to the participants lived experiences. While the researcher could determine where the practices intersected, the relevance could not be determined from this study but provides a succinct phenomenal connection for future research on building knowledge infrastructure. Jessen (2021) states that:
knowledge may also be generated, transmitted, and held differently within a culture depending on gender, age, and cultural roles. Such conditions create specialists on certain topics and require researchers to recognize the diversity of knowledge across and within Indigenous communities. Yet these time-tested approaches can also be complemented with modern tools and techniques, including those of science that augment Indigenous ways of knowing. (p. 99)

This research has presented my ethical duty to advocate for change, especially given Indigenous peoples' past and present injustices. In respecting the self-determination of Indigenous peoples, it should be a necessary condition to support mutually beneficial research processes and outcomes by changing the narrative. I fully admit that it was a unique and enjoyable experience in its substance. Life happened, and I was allowed to obtain another doctorate while being given a role to incite change within sovereign nations.

**Chapter Summary**

This final chapter presented the key findings and conclusions of the study encompassing the entire research endeavor. Knowledge infrastructure is a continuum of knowledge that provides several tools and services designed to ensure the constant exchange of knowledge among all people. In examining the lived experiences of the study’s 15 participants, critical interpretations of building knowledge infrastructure within sovereign nations have been identified and described. The five themes have been summarized and drawn from these lived experiences of the study’s participants.

This research aimed to provide insight into the measures sovereign nations may need to strategize and practice to build an effective knowledge infrastructure. The main research question was stated, and the key findings of that research question were discussed. The main
research question asked, to what extent, if at all, might knowledge infrastructure support
generational advancement through learning and development programs within a sovereign
nation? There were several conclusions that pointed to the significance of building knowledge
infrastructure with sovereign nations. This chapter concludes with recommendations for future
research and an evaluation of the research topic.
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APPENDIX A

CITI Training Certificate

This is to certify that:

**George Vigil**

Has completed the following CITI Program course:

**GSEP Education Division**
(Curriculum Group)

**GSEP Education Division - Social-Behavioral-Educational (SBE)**
(Course Learner Group)

1 - **Basic Course**
(Sage)

Under requirements set by:

**Pepperdine University**

Verify at [www.citiprogram.org/verify/?wa7113783-b0a9-4661-ba71-56ec5f57c367-30360863](http://www.citiprogram.org/verify/?wa7113783-b0a9-4661-ba71-56ec5f57c367-30360863)
Date: June 21, 2022

Protocol Investigator Name: George Vigil

Protocol #: 22-05-1853

NOTICE OF APPROVAL FOR HUMAN RESEARCH

Project Title: GENERATIONAL ADVANCEMENT IN SOVEREIGN NATIONS; A QUALITATIVE STUDY UNDERSTANDING THE SIGNIFICANCE OF KNOWLEDGE INFRASTRUCTURE.

School: Graduate School of Education and Psychology

Dear George Vigil:

Thank you for submitting your application for expedited review to Pepperdine University's Institutional Review Board (IRB). We appreciate the work you have done on your proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. As the nature of the research met the requirements for expedited review under provision Title 45 CFR 46.110 of the federal Protection of Human Subjects Act, the IRB conducted a formal, but expedited, review of your application materials.

Based upon review, your IRB application has been approved. The IRB approval begins today June 21, 2022, and expires on June 20, 2023.

The consent form included in this protocol is considered final and has been approved by the IRB. You can only use copies of the consent that have been approved by the IRB to obtain consent from your participants.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit an amendment to the IRB. Please be aware that changes to your protocol may prevent the research from qualifying for expedited review and will require a submission of a new IRB application or other materials to the IRB. If contact with subjects will extend beyond June 20, 2023, a continuing review must be submitted at least one month prior to the expiration date of study approval to avoid a lapse in approval.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite the best intent, unforeseen circumstances or events may arise during the research. If an
unexpected situation or adverse event happens during your investigation, please notify the IRB as soon as possible. We will ask for a complete written explanation of the event and your written response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the IRB and documenting the adverse event can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* at community.pepperdine.edu/irb.

Please refer to the protocol number denoted above in all communication or correspondence related to your application and this approval. Should you have additional questions or require clarification of the contents of this letter, please contact the IRB Office. On behalf of the IRB, I wish you success in this scholarly pursuit.

Sincerely,
Judy Ho, Ph.D., IRB Chair
cc: Mrs. Katy Carr, Assistant Provost for Research

**Pepperdine University 24255 Pacific Coast Highway Malibu, CA 90263 TEL: 310-506-4000**
APPENDIX C

A Study Participation Request Email

Dear Participant:

My name is George A. Vigil, and I am a doctoral candidate at Pepperdine University’s Graduate School of Education and Psychology. I am embarking on gathering data for my dissertation study entitled *Generational Advancement In Sovereign Nations; A Qualitative Study Of Knowledge Infrastructure* (IRB Approved - Protocol ID#22-05-1853).

The purpose of this qualitative case study is to provide a corporate analysis of the impact of mentoring minority frontline managers. I am seeking volunteers to participate in my qualitative study.

Participation in this study will require up to one hour of your time. You will be asked to take part in one recorded interview that can be conducted on the phone, online, or in person if circumstances permit.

If you choose the phone option, I will prove the telecommunication services that will work best for both of us. If you choose the online option, I will coordinate a Zoom.us meeting with a password. If you choose the in-person option, we will decide on a location together. The study is designed to gather data from a very specific population.

Please note that to participate in this research you meet the following criteria:

1. You are at least 21 years old or older;
2. You are a tribal member, community member, or employee that currently or has worked for a sovereign nation in the United States; and
3. You have experienced learning and development programs in a professional setting.

If you are interested in participating in this study, please read and complete the attached consent form and return it to george.vigil@pepperdine.edu within 48 hours to schedule an interview. If you have any questions, please contact me using the same email address.

Thank you in advance for your time and consideration. I look forward to your email.

George A. Vigil, Ed.D.
Ph.D. Candidate
E: george.vigil@pepperdine.edu
APPENDIX D

Informed Consent for Participation in Research Activities

**Invitation:** You have been invited to participate in a doctoral research study conducted by George A. Vigil, Ph.D. doctoral candidate, and his advisory team, Dr. Martine Jago, Dr. Paul Sparks, and Dr. Dawn Dennis. This invitation has been extended to you based on a series of qualifications required in the study, including enrollment in a doctoral program within a graduate school of education. Your participation in this study is voluntary. Please read the information below and inquire with me about anything you need help understanding or is unclear before you decide to participate.

**Study Title:** Generational Advancement In Sovereign Nations; A Qualitative Study Of Knowledge Infrastructure (IRB Approved - Protocol ID# TDB).

**Reason for the study:** The purpose of this descriptive qualitative study is to explore the underlying personal and professional advancement challenges experienced for Indigenous Americans within a sovereign nation by examining lived experiences.

**Focus of the study:** To what extent, if at all, might knowledge infrastructure support generational advancement through learning and development programs within a sovereign nation?

**Procedures and format of the study:** Participation in this study will require up to 30 minutes of your time. You will be asked to participate in one recorded interview that can be conducted virtually via Zoom.us. If you choose the phone option, I will prove the telecommunication services that will work best for us. We will decide on a location together if you choose the in-person option.

**Possible risks and discomfort:** There will be no more than minimal risks assigned to individuals participating in this study above the risks and discomfort assigned to daily living. In telling the lived experiences as a frontline manager could possibly encounter discomfort in the telling of challenging experiences.

**Possible benefits to participants and society:** There are no known direct benefits to the participants of the study, however, there may be some cathartic outcomes to the telling of the lived experiences as a frontline manager. There are the anticipated benefits of this research to the educational community, the current body of literature and research, and society in general regarding mentoring of minority frontline managers within an organizational context.

**Participation and withdrawal:** All participation is voluntary. Any volunteers who refuse to participate at any point in the process may discontinue without penalty. Once a participant withdraws from the study, there is no re-entry.

**Confidentiality of participants:** There will be no identifiable information collected in this study. All data collected will be presented in summative form.
**Mandated reporting:** The written and recorded data will be kept confidential as far as allotted by the law within the United States of America. If the researcher is required by law to disclose information collected, the disclosure will occur in accordance with the law. An example of such an insistence would be elder abuse.

**HSPP review:** The written and recorded data may be reviewed by the Human Subjects Protection Program (HSPP) housed within Pepperdine University. The HSPP occasionally monitors and reviews research studies to protect the rights and welfare of research participants.

**Identity Protection:** Once you agree to the interview, you will be assigned an identifier (pseudonym) which will remain with your data for the duration of the study. This identifier is assigned for the sole purpose of protecting your identity throughout the study, in each part.

**Collection and processing of data:** All collected data will be assigned a pseudonym. The audio files from the interviews will be assigned a numerical code and sent to a private, third-party transcription service to be transcribed into a written document. The transcription service is a provider which operates under a strict non-disclosure agreement. The service provider will not be given the name, personal information, or pseudonym of any participants within the study.

**Storage of Data:** The written and recorded data will be transferred from the researcher’s personal devices to encrypted files on a password protected external digital drive immediately concluding the collection of said data. The drive will be stored in the researcher’s residence: out of view, in a lock box, behind closed doors. All data and data analysis will remain on the password protected external drive. The written data (including but not limited to transcriptions of interviews and researcher’s notes) will be saved for a minimum of five years in the same manner as stated above.

**Accuracy and analysis of data:** Each participant in the study given the option to review the transcript once it has been returned from the service provider. All data collected will be deidentified using pseudonyms, transcribed, coded, analyzed, and written in composite stories using qualitative methods.

**Emergency care and compensation:** There is no anticipated injury for the participation of this study. Any and all injury volunteers experience will be the responsibility of the volunteer. Pepperdine University does not provide any monetary compensation for injury during this study. The researcher of the study does not provide any monetary compensation for injury during this study.

**Contact and questions:** Each volunteer can contact the researcher for the duration of the study regarding questions or concerns pertaining to the research. The following contact information should be used: George A. Vigil at george.vigil@pepperdine.edu or Dr. Martine Jago at martine.jago@pepperdine.edu.

**Rights of research:** Any questions or concerns about your rights as a volunteer research participant, or any general research questions can be addressed by Dr. Judy Ho, Chairperson of
the Graduate and Professional Schools Institutional Review Board at Pepperdine University at gpsirb@pepperdine.edu.

**Documentation of informed consent:** You are voluntarily deciding whether or not to participate in this research study. By typing a numerical sequence below (any combination of up to 6 numbers of your choice) next to the I Agree button below, your consent to participate is implied. You may print a copy of this document for your records.

**Signature of Volunteer Research Participant:** I, as the volunteer research participant, have read the information provided above (pages 1-2). I have been provided with the opportunity to ask questions, and if I chose to ask any questions, they have been answered to my satisfaction. By providing a numerical sequence below (any combination of up to 6 numbers of your choice), I agree to be audio recorded. I have been provided with a digital copy of this form for my records.

**I agree** - please type a numerical sequence number (any combination of up to 6 numbers of your choice) here and return the entire document in an email to the researcher at the provided address.

*Note – by proceeding to schedule an interview, you as the volunteering participant agrees to the information provided within this document.

**Signature of Study Researcher:** I, as the study researcher, have explained the process of the research to the participant above (pages 1-2). The volunteer participant is knowingly and willingly able to participate in this study.

**I agree** - George A. Vigil (study researcher)
APPENDIX E

Interview Protocol

**Items**

**Organizational Structure**

11. Which employees in your enterprise would benefit from knowledge infrastructure being built?
12. How does the enterprise support employees in building their knowledge of indigenous culture?
13. How would you change (or develop) current processes to sustain the creation of knowledge infrastructure within your enterprise?

**Technology**

14. What existing tools can be used to aid efforts to build knowledge infrastructure?
15. What new technologies are required for knowledge infrastructure construction?
16. In what ways do technological advancements support indigenous knowledge?

**Indigenous Knowledge**

17. What is the role of indigenous knowledge in enterprises owned/operated by sovereign nations?

**Knowledge Sharing**

18. Why do you think knowledge sharing is essential for enterprises?
19. How does knowledge sharing impact the growth/sustainability of the enterprise?

**Learning and Development**

10. In what ways does the employee training include aspects of indigenous knowledge?
11. What abilities and skills are required to succeed in a sovereign nation’s workplace?
12. Identify barriers that prevent employees from acquiring these abilities and skills.