

Noor Dewood

Dr. Sarah Pattison

Cornell University Laidlaw Leadership and Scholarship Programme

From the Scientist to the Intuitor: A Transformative Experience in Ecuador

Science trains us to trust data, models, and repeatability, but leadership often demands faith in uncertainty, people, and intuition. Research and leadership contexts frequently require a combination of elements: objective, evidence-based approaches, and a unique form of awareness that can only come from an experienced, intuitive leader. An underrecognized theme in STEM industries and careers is the importance of cultivating connection, empathy, and intercultural competence in the training, leadership, and preparation of students and professionals in these fields. In this experiment, I, a chemical engineering student, become both observer and subject, forced to reckon with situations in which analytical tools alone cannot guide decision-making as I embark on a 6-week journey with the Pachaysana Foundation in Ecuador. I choose to write this reflective piece in the form of a scientific report, for the sake of habit, defaulting to headings and methodology when confronted with ambiguity, culture, and human complexity.

Research Question: *What happens when an engineered commitment to objectivity is subjected to sustained exposure to intercultural uncertainty?*

Background Research on Noor's leadership:

Prior to delving into my Leader-in-Action experience, it is integral to consider the existing "literature" I had on my leadership approach and strengths before the summer spent in Ecuador, which in this case is the results of the *CliftonStrengths for Leaders* assessment.

My CliftonStrengths profile is dominated by Strategic Thinking themes: Strategic, Learner, Ideation, Intellection, Input, and Analytical. This reflects a mind that is constantly synthesizing information, identifying patterns, and imagining multiple pathways forward. These strengths align closely with scientific training as a chemical engineer: I am comfortable operating in ambiguous contexts, generating hypotheses, and iterating on solutions. My strategic feature enables me to reflect on the “why” of what I do and how I lead, while my analytical feature ensures that decisions are grounded in logic and evidence, with attention to the “how” and the implementation dimensions of leadership. Together, these talents enable me to approach leadership challenges with intellectual rigor rather than impulse.

Yet what makes my leadership distinctive is how Individualization, Arranger, Command, and Self-Assurance complement these cognitive strengths. These themes move leadership from theory into lived human interaction. Individualization, in particular, has become central to my leadership philosophy. I believe in developing a context-dependent leadership approach, fundamentally a code-switcher. Rather than applying a single leadership model universally, I aim to listen first, calibrate my response, and meet individuals where they are, recognizing that effectiveness emerges not from rigidity, but from responsiveness.

Methodology

The six-week immersive partnership with the Pachaysana Foundation focused on engaging Cornell Laidlaw Scholars in a community-centered, participatory approach to leadership and research, in which learning emerged through sustained presence rather than predetermined outcomes. Rather than operating within a rigid project framework, the methodology emphasized relationship-building, observation, and responsiveness to local priorities, allowing our work to evolve in dialogue with agrarian and Indigenous communities in

the Ecuadorian Highlands and Amazon. My fellow scholars and I engaged in community-based education, storytelling, and environmental initiatives by working alongside local educators, activists, artists, and land-restoration practitioners, integrating cultural immersion with reflective leadership practice. This approach positioned community members as co-educators and knowledge holders, ensuring that research and leadership efforts were grounded in lived experience, cultural context, and mutual trust, while encouraging scholars to balance analytical thinking with intuition and intercultural awareness.

Hypothesis: Expectations and Relevant Theory

Before beginning my leadership-in-action experience, I entered the context with both conceptual grounding and personal curiosity about how I expected to behave versus how I would actually behave. My preparation was informed by *Personal Leadership: A Methodology of Two Principles and Six Practices*, particularly the practice of attending to judgment. This practice centers on the idea that leadership development begins not only with observable actions but also with internal experience: noticing assumptions, initial reactions, and the cognitive processes that drive decision-making. I anticipated that attending to my judgments, especially the automatic ones, would be challenging in unfamiliar environments, requiring iterative reflection, self-regulation, and adaptation.

This expectation aligns with Kegan and Lahey's "Immunity to Change" framework, which emphasizes the intentional engagement with entrenched assumptions and implicit biases (Kegan & Lahey, 2009). The research describes how leaders resist change due to "reflexes" that they are unconscious of, which drive them to resist change by labeling certain modes of thinking

or leadership styles as “this is just how I am” rather than recognizing the choice one has at every given moment of a new context or leadership challenge (Kegan & Lahey, 2009).

Prior to joining the Laidlaw Scholars program, I described to Dr. Pattison, the associate director for academic programs at the Einaudi Center, how I value code-switching across the cultural and professional contexts in which I have been exposed. She introduced me to the term "social chameleon," which describes a level of adaptability and understanding of differences in a person. I decided to develop the “chameleon method” as a framework for navigating periods of resistance to change. I describe my thought process below:

- 1- Think about the context from an outsider’s perspective. How does the position I am in look from the perspective of a wise friend or mentor who is not emotionally involved in the given context?
- 2- Divide the leadership challenge into two categories:
 - A- The familiar: What aspects of this experience have I encountered before? Are any of my prior reactions or approaches relevant/ useful here? Or should I challenge myself to pursue a novel approach to thinking or to engaging with the context?
 - B- The new: Which dimensions of this experience are completely new? How can I develop an approach that aligns with my values to address a situation I have not experienced before?
- 3- Leverage the awareness of my cognitive processes developed in the previous two steps to make optimal decisions during the experience.

- 4- Reflect on your decision-making and approach following the experience, and iterate on them for the future. The goal here is to gradually develop a set of approaches that are relevant and malleable across different contexts.

Developing this thought process throughout the spring semester, leading up to my trip to Ecuador, served as a catalyst to delve deeper into leadership concepts and to consider how I lead and interact with the world in simpler situations throughout my daily routine prior to embarking on this journey.

Data and Findings: An Analysis of the Experience

Two aspects that I felt were fundamental are:

1. *Adjusting to new ways of living, eating, and connecting*

My experience in Ecuador consisted of 3 main parts: an introduction in Quito, a host family stay in Pintag (a mountainous region 30 minutes away from Quito), and a host family stay in Mushullakta in the Amazon Rainforest. These 3 experiences required physical adjustments to living spaces, the family's lifestyle, the indigenous language (Quechua), and new diets.

Moving between Quito, Pintag, and Mushullakta was not merely a change of location but a process of continuous adjustment and learning. Research on intercultural adaptation emphasizes that sustained exposure to unfamiliar cultural systems promotes growth through cycles of discomfort, reflection, and adjustment (Kim, 2001). In this context, moments of uncertainty became productive rather than limiting, pushing me to take the time to listen and understand before responding or making claims. These experiences made me more creative,

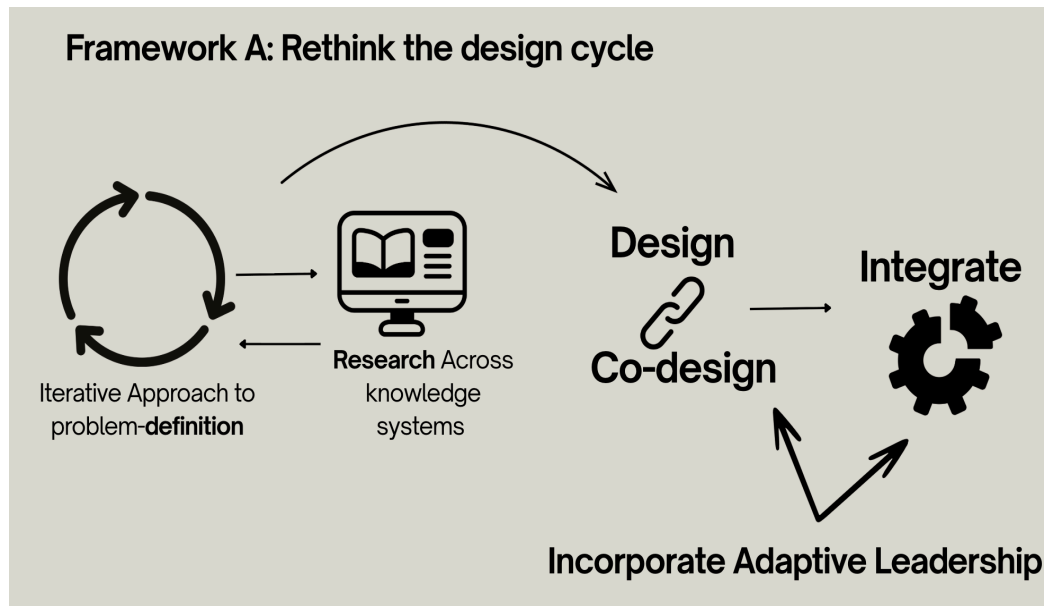
helped me find novel ways to say something funny at the dinner table with a family whose language I do not speak, and helped me understand my physical sensations. They also led me to value communicating with my peers as a means of solving my daily challenges.

2. *Exposure to new ways of knowing*

Coming from an academic environment with a strong emphasis on continuous exposure to theory and structured problem-solving, I was accustomed to understanding knowledge as something that is articulated and evaluated. During my time in Ecuador, this expectation was challenged through experiences that prioritized lived reality over abstraction. One particularly impactful moment was a workshop on La Lucha (the struggle), led by indigenous educators, in which learning emerged through storytelling, collective reflection, and dialogue rather than instruction. Instead of being presented as an obstacle to overcome, struggle was framed as a shared experience. We were told to use drawings of a human body to pinpoint how local and global challenges are internalized and experienced. This mapping approach taught us to think critically about issues such as capitalism, environmental injustice, and conflicts. It made me understand the power of sharing and communication in uncovering dimensions of global issues that are challenging to identify.

This exposure to intercultural uncertainty has led me to reconsider approaches worth introducing in my career and in engineering. It has motivated me to think about theories of knowledge in other aspects of my life. This answers my research question: *What happens when an engineered commitment to objectivity is subjected to sustained exposure to intercultural uncertainty?* This objectivity translates into creativity. This experience has led me to develop a framework that rethinks how the design cycle, commonly used in engineering and design

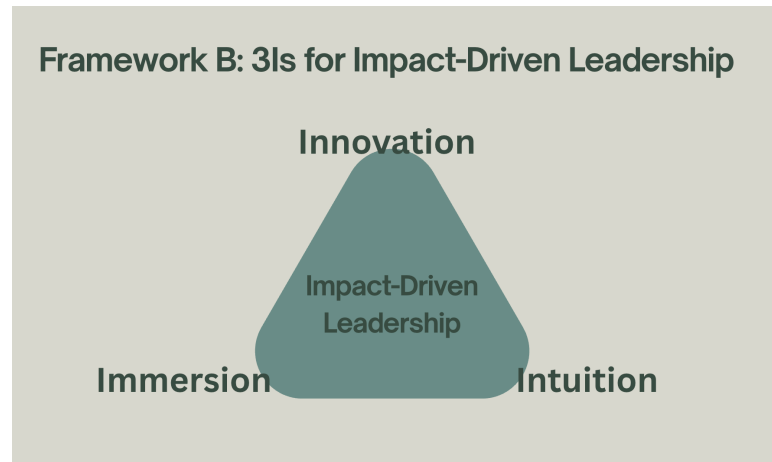
careers, can be adapted to meet the needs of communities and individuals. A diagrammatic scheme is presented below:



Conclusions and Takeaways:

This experience ultimately reframed my understanding of leadership, knowledge production, and my role as an engineer in complex human systems. Through sustained engagement with intercultural uncertainty, I found that the principles of attending to judgment and adaptive leadership were not abstract ideals but practical tools that guided my daily decisions. Looking ahead, I aim to carry forward the frameworks I developed during and after this experience into my academic and professional trajectory, particularly as I pursue work at the intersection of engineering and sustainability. This experience aligns closely with Sustainable Development Goal 4 (Quality Education), through its emphasis on decolonizing education and exploring new ways of seeking knowledge. There has also been a focus on Sustainable Development Goal 13 (Climate Action), by highlighting the importance of locally grounded

environmental projects. By integrating technical rigor with intuitive, intercultural awareness, I hope to contribute to solutions that are not only efficient but but deeply human. I conclude this essay with a framework that summarizes how I hope to approach my leadership going forward.



Works Cited

Gallup, Inc. (2015). *CliftonStrengths® for leaders*. Gallup Press.

Kegan, R., & Lahey, L. L. (2009). *Immunity to change: How to overcome it and unlock the potential in yourself and your organization*. Harvard Business Press.

Kim, Y. Y. (2001). *Becoming intercultural: An integrative theory of communication and cross-cultural adaptation*. SAGE Publications.