



Translating *Convivir* into Gender Equality in Rural Colombian Primary Schools: The Case of Escuela Nueva

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ABSTRACT

In Colombia, as in many developing countries, rural education is pivotal in promoting gender equality in society. Existing literature proposes quantitative indicators to measure gender equality in schools, such as enrollment and test scores, though few have explored approaches that capture the *quality* of the education that boys and girls receive. Many argue that collaborative education models, alternatives to the 'traditional' educational experience, play a crucial role in promoting democratic ideals such as equality and inclusion in educational settings. Drawing on the Latin American concept of convivencia and Brazilian pedagogue Paulo Freire's critical pedagogy, this case study explores the effectiveness of a Colombian cooperative education model, Escuela Nueva Activa (ENA), in fostering gender-equal learning environments. This research culminated in the creation of a qualitative methodological intervention, a gender equality rubric, that contributes to the aforementioned gap in the educational research and argues that a combination of quantitative and qualitative indicators provides a more comprehensive understanding of the quality of education and how it relates to gender equality. Further research and testing of the rubric are imperative, but the proposed tool serves as a strong methodological foundation for future research in the intersection of gender equality, collaborative education, and international development.

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This dissertation is dedicated to my Nonna, who I lost at the beginning of this process. Thank you for teaching me my value as a strong, curious woman. I hope I continue to make you proud.

ACRONYMS

EFA – Education for All

EN – Escuela Nueva

ENA – Escuela Nueva Activa

FARC – Revolutionary Armed Forces of Colombia

FEN – Fundación Escuela Nueva

GBV – Gender Based Violence

GAD – Gender and Development

LAC – Latin America and the Caribbean

IDB – Inter-American Development Bank

MDG – Millennium Development Goal

MoE - Ministry of Education

SDG – Sustainable Development Goal

WID – Women in Development

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INTRODUCTION

"'The battle of genders' is not a zero-sum game....gender equality in schools is a benefit for the whole society" (Molla, 2016, p.5).

According to UNESCO (2020), the Latin American and Caribbean region (LAC) is characterized by the most dramatic economic and social inequalities in the world, which have intensified during the ongoing COVID-19 pandemic. The inherent poverty of the region is exacerbated by historically-rooted, unequal structures that are "both the effect and the cause of asymmetrical power relations between urban and rural areas, between indigenous peoples and mestizo subcultures, between men and women, and of course, between the North and the South" (Stromquist, 2001, p.40). This inequality and impoverishment, in turn, plagues educational institutions where "student socioeconomic status is the variable with the greatest impact on learning" (ibid., p.41). Rural schools in LAC present harsh learning environments for students and educators and pose numerous challenges that affect the rates of school completion, especially for girls (McEwan, 2008). According to McEwan, the education systems in LAC are historically exclusionary against rural poor populations, which serves as the central motivation behind Fundación Escuela Nueva's (FEN) extensive rural education reform that dates back to the 1980s (Colbert and Arboleda, 2016).

In the recent past, Colombia has made significant efforts to increase educational opportunities for the country's rural learners (60-76% of municipalities in Colombia are considered rural) but much is left to be done in terms of improving the quality of these learners' educational experience (Radinger et al., 2018). Although Colombia has achieved near gender parity in primary education (.97 as of 2018), the proliferation of basic education fails to upend the structural inequalities that perpetuate educational disadvantages in rural areas, where multidimensional poverty is twice as high as urban areas (World Bank, 2020; Radinger et al., 2018), nor does it necessarily translate to increased educational *quality* or *equality* of access in rural areas (Stromquist, 2001). This phenomena serves as a prime example of why the "quality of education agenda" is extremely important to the debates surrounding gender equality and inclusion in education (Rao and Sweetman, 2014).

Research Objective

This dissertation sets out to answer the question:

How might Fundación Escuela Nueva (FEN) and similar organizations that promote cooperative education models develop a qualitative evaluative tool to determine the degree of gender equality present in rural, multigrade primary school classrooms?

It offers a qualitative, methodological intervention into the current debates surrounding gender equality and collaborative education, using the case of Escuela Nueva (EN), a cooperative education pedagogy developed by FEN to address the disparities of the rural, multigrade Colombian education system. By doing so, this study seeks to contribute to the growing debate surrounding the "quality education agenda" using a gender lens – it argues that the quality of the educational experience is extremely important in understanding and evaluating gender equality in schools. Stromquist (2001) notes that "there is very little research on the ethnographic nature of documenting the lived experience of girls and boys in Latin American schools" (ibid., p.46). Employing complementary quantitative and qualitative instruments, this dissertation aims to tell the more comprehensive and nuanced narrative about the educational experience of girls and boys that is often overlooked in strictly quantitative education assessments (ibid.). The ethnographic-inspired research for this dissertation culminated in the creation of a pilot framework for FEN to build upon and adapt in future evaluations on the relationship between its education model and gender equality in the rural communities that it serves around the developing world.

Research Context

Before diving into the conceptual framework and debates surrounding gender equality, collaborative education, and development, the reader should understand the central terms as they relate to the argument of this dissertation. In addition, this section will provide a brief history of Escuela Nueva, the central collaborative pedagogical model of this study, and explore its most relevant components.

Defining central concepts

- I. Gender "The way that male and female roles are socially defined in a society; refers to the specific roles, treatment, and expectations that accompany one's biological sex" (Janigan and Masemann, 2017, p.183). The notion of gender is a relational concept that is historically rooted in the sexual division of labor but changes over time and between cultures (UNICEF, 2017; Chant and Sweetman, 2012). Although in 2021, there is a growing debate surrounding the multiplicity of gender extending beyond male and female, most accessible published research focuses on the male-female binary. As this dissertation is founded on said research, it will employ 'gender' to mean the social construct which distinguishes differences between males and females.
- II. **Gender equality** true, substantive gender equality recognizes "the ways in which women are different than men, in terms of their biological capacities and in terms of the socially constructed disadvantages women face relative to men" (Kabeer, 1999, p.37). It involves the equality of *treatment* and the equality of *opportunity* for both men and women to contribute to (and benefit from) all forms of development (Subrahmanian, 2005; UNICEF, 2017).
- III. Gender analysis a critical evaluation that "examines the relationships between females and males and their access to and control of resources and the constraints they face relative to each other" (UNICEF, 2017). This dissertation and its components serve as a gender analysis.
- IV. **Collaborative learning** "An instructional approach that emphasizes student-centeredness, teamwork, and shared responsibility in the co-construction of knowledge and skills" (Okojie and Boulder, 2020). Collaborative learning is often associated with **cooperative learning** which is defined as "the instructional use of small groups so that students work together to maximize their own and each other's learning" (Johnson et al., 1994).¹
- V. **Active learning** refers to a broad spectrum of teaching and learning strategies, generally defined as "instructional activities involving students in doing things and thinking about what they are doing" (Bonwell and Eison, 1991, p.iii). In simplest terms, "learning by doing" or experiential learning. These alternative approaches to learning

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¹ FEN defines its pedagogy as "aprendizaje cooperative" (*cooperative* learning). For the purposes of this dissertation, "cooperative" and "collaborative" will be used interchangeably, as they are characterized by extremely similar learning goals and strategies and are used interchangeably in literature.

challenge conventional methods that are teacher-driven and criticized for reproducing economic, political, and social hierarchies and inequalities that plague broader society (ibid.).

VI. **Multigrade schooling** – the quintessential one-room schoolhouse. Multigrade schools are often small, comprising of students from multiple grade levels who are taught by one teacher. These schools are typically born out of necessity in sparsely populated rural areas. Multigrade schools often suffer from challenges including unqualified or poorly-trained teachers, a dearth of teaching and learning resources, and inadequate supplies and facilities (McEwan, 2008).

Escuela Nueva: a pedagogical innovation²

"Imagine a primary school where children work together to learn things that are relevant to their lives, where teachers are facilitators who foster comprehension and democratic behavior, and where parents and communities are actively involved in their children's education. Now imagine that this is not an exclusive private school open to a wealthy few, but a state school in a developing country attended by children who are among the poorest in the world" (Parandekar et al., 2017, p.3).

EN is a transformative educational approach whose every component was carefully and intentionally designed to promote active, cooperative learning and to provide every student, male or female, rich or poor, with a quality education that fulfills his or her learning needs. It is imperative to understand EN's influential history and unique pedagogical design in order to comprehend the methodological approach and rationale of this dissertation.

Escuela Nueva's history

EN was established in 1975 as the seminal multigrade, rural education reform in LAC and set out to close the gap between urban and rural school performance in Colombia (McEwan, 2008). The learning experience in these rural schools was characterized by rigid schedules and

² Colbert, V. and Arboleda, J. (2016) 'Bringing a student-centered participatory pedagogy to scale in Colombia', *Journal of Educational Change*, 17(4), pp. 385–410. doi: 10.1007/s10833-016-9283-7.

assessment systems, ineffective teacher training, and content-heavy curriculum that failed to connect to students' daily lives, and traditional passive-teaching practices such as lecture-based teaching and rote-learning (see Figure 1) (Colbert and Arboleda, 2016). By 1985, the Colombian Ministry of Education (MoE) adopted EN as the national teaching strategy for rural education and received a loan from the World Bank to bring it to scale; by 1992, EN was implemented in 20,000 rural schools and considered one of the five pillars of the Colombian government's plan to eradicate extreme poverty (ibid.). The dominance and influence of EN suffered in 1991 when the Colombian government decentralized the nation's education system, abandoning its national curriculum and giving individual municipalities the decision-making power regarding content and structure of local education (ibid.). Decentralization caused trouble for the EN model since it was no longer a unified, homogenic national policy and it experienced local opposition, heterogeneity of implementation, and uneven attention to teacher-training (Hammler, 2017). Despite this setback, EN has remained a prominent force in over half of Colombia's primary schools and three-quarters of the country's rural primary schools among other academic institutions that incorporate its model informally (ibid.).

Figure 1: The conventional school (escuela normal) versus Escuela Nueva (Colbert and Arboleda, 2016, p.392).

Features	Conventional school	Escuela Nueva		
Teaching	Frontal Transmission	Facilitating Child-centered learning		
Learning	Memoristic	Reflexive-Comprehensive		
Student Involvement	Passive	Active		
Classroom organization	Sitting in rows	Small groups		
Content	Information overload	Process oriented, linked to children's everyday life		
Books and materials	Scarce	Plenty Learning Guides		
Learning Setting	Classroom only	Classroom and school environment, community		
School-Community	Weak link	Strong link		
Calendar-Schedules	Rigid	Flexible		
Evaluation	Memory-based Summative Occassional	Formative On-going Qualitative Competency-based		

Escuela Nueva Activa (ENA), EN's most recent iteration, has four central components: curriculum, teacher training, management, and community development (Fundación Escuela Nueva, 2021). Each element utilizes active and cooperative learning strategies that integrate teachers, learners, and the local community into the learning process, exemplifying a context-specific and adaptable collaborative education model that promotes experiential learning and

transforms students into protagonists of their own learning (ibid.). The star of the show, the *guia de aprendizaje* (learning guide), incorporates various learning strategies that encourages students to collaborate with their peers and teachers, reflect on their lived experiences, and apply their knowledge to real-world settings. The *guias* are intended to be shared between students and to facilitate conversation and cooperation among them (Colbert and Arboleda, 2016). In pre-service and in-service training workshops, teachers are trained how to properly use the *guias* and are encouraged to participate in student activities and serve as facilitators and co-creators of knowledge production. Heriberto Castro, the Director of Curriculum Design, describes the *guias* as a hybrid between a student textbook, a classroom workbook, and a teacher guide that are revised after every release of MoE national learning standards (Castro, 2021).

Other ENA innovative instruments include an elected student government, self-recorded attendance, a traveling community journal, and a friendship mailbox; Clarita Arboleda, FEN's Chief Operating Officer, asserts these unique elements were intentionally designed to promote democratic and inclusive behavior, student autonomy, and the exchange of ideas and knowledge, while simultaneously strengthening the bonds between educational institutions and the communities surrounding them (Arboleda, 2021). Furthermore, students are given opportunities to lead activities, such as the morning prayer or dynamic activities, which in turn earn them respect from their peers as competent leaders. Students are encouraged to explore beyond the four walls of the classroom to supplement their in-class education with real-life experience, making their education more relevant to their daily lives (Hammler, 2017). Each ENA tool is intended to facilitate interactions between students, teachers, and their educational environment; these interactions lie at the heart of ENA's pedagogy and therefore serve as the foundation of the analysis of this dissertation.

Proliferation of ENA in LAC and beyond

Given the lauded, proven successes of the EN/ENA pedagogical model in Colombia - Colombia ranks only behind Cuba in terms of rural quality education, where rural EN students outperform their urban counterparts (Colbert and Arboleda, 2016) - several other developing countries including Guatemala, Nicaragua, the Philippines, and Vietnam have adopted the ENA model or have created their own iterations to address rural education disparities with evidenced success (Baessa et al., 2002; Juarez and Associates, 2003; Parandekar et al., 2017).

Therefore, ENA is not just an exceptional Colombian phenomenon, but has proven to be an effective educational strategy that can be adapted to various cultural, economic, political, and social contexts, which is key for any development initiative to bring the transformative change it envisions.

Structure of the Dissertation

This dissertation is comprised of five chapters:

- I. The Introduction has presented the main research objectives that guided the research and analysis for this dissertation. It then highlighted the definitions of central terms and provided context of the rural education climate in LAC and Colombia. It concluded by briefly exploring EN's history, design, and relevance to the global debate surrounding collaborative education and development.
- II. Chapter 2 dives into the conceptual foundation that frames the argument of this dissertation, placing it in the global and regional debates surrounding gender equality, collaborative education, and development. It highlights the tensions between the quantity versus quality education debate, which serves as a central motivation behind the research project that explores the educational experiences of boys and girls in rural Colombian schools.
- III. Chapter 3 takes the reader through the carefully thought-out methodology of the research project and dissertation, explaining the rationale behind choosing digital, educational ethnography as the methodological inspiration and the research methods utilized to collect data. It also explores the various obstacles and limitations I encountered while conducting remote research. This chapter serves as the methodological foundation for the analysis that follows (Chapter 4), as methodology is a critical element in the design of the pilot framework which the project produced.
- IV. Chapter 4 explores the creation of the evaluative tool that I developed for FEN and provides an in-depth qualitative analysis of the various elements of the gender equality rubric, connecting the gender-sensitive indicators to the conceptual framework of Chapter 2. It presents the project's main findings regarding the connection between ENA and gender equality.

V. The Conclusion closes the dissertation by connecting the main research findings to the central argument and global debates on collaborative education, gender equality, and development.

CONCEPTUAL FRAMEWORK

Introduction

This chapter explores the academic literature and current debates surrounding the intersection of gender equality, education, and development. It first examines the broader global debates and funnels towards a narrower scope to explore regional concepts and pedagogies that are most relevant to LAC and to the argument of this dissertation. It concludes by highlighting the gaps in the literature and how this dissertation seeks to fill those voids.

Global Debate: Gender and Development

The roadmap toward gender equality in international development has been reimagined over the last three decades and continues to evolve; while the Women in Development (WID) and 'smart economics' approaches frame women and girls as the bearers of development and solutions to poverty, the Gender and Development (GAD) approach poses them as equal partners to their male counterparts in the fight for equal rights and opportunities and economic prosperity (Aikman et al., 2011; Chant and Sweetman, 2012; Kabeer, 1999). The importance of the intersection of gender and development is most clearly exemplified by the UN Millennium Development Goal and Sustainable Development Goal frameworks that specifically incorporate gender equality as a goal of the global development agenda (MDG 3 and SDG 5, respectively) (UN Women, 2016).

While the definition of gender is ever-evolving, most academic literature surrounding gender and development agrees that gender is a *socially* constructed concept that varies between cultures and the presumed characteristics associated with a specific gender are determined by social, economic, and political systems of a given society (Janigan and Masemann, 2017; Kabeer, 1999; Stromquist, 2001; Subrahmanian, 2005). Gender is not a static condition but a relational process that focuses on the relationships and unbalanced power dynamics between men and women and how they change over time (Chant and Sweetman, 2012; Rao and Sweetman, 2014; Subrahmanian, 2005). Because gender is a relational and dynamic concept, it is important to study the interactions between males and females in society and how they interact with and within societal institutions, hence why this dissertation explores the

relationship between male and female students with their teachers and their educational environment.

Global Debate: Gender Equality and Education

For decades, education has been a core tenet of the mainstream development agenda, as exemplified through MDG 2 and SDG 4, which set the goal for equal, accessible basic education for all (EFA) (UN Women, 2016). Additionally, it has been leveraged as a tool to achieve gender equality in developing contexts (Jha and Shah, 2020). As Subrahmanian (2005) argues, education is linked to both the child's rights framework and rights-based approaches to development, as it is theorized to be a basic human right that all people are afforded, regardless of their gender.

However, despite the heavy emphasis on the proliferation of EFA, the *quality* of education has not been in center focus, albeit its extreme importance to the gender equality in education debate (Stromquist, 2001). Gender parity in education (read: formal equality) can be defined as the "sameness" of men and women in terms of access to and participation in education (Subrahmanian, 2005); but Subrahmanian notes that parity is not a comprehensive definition of gender equality in education as it does not represent education as a dynamic process. The equality in education debate is dominated by measurable phenomena such as enrollment and test scores, but these indicators fail to capture the quality of the educational experience of boys and girls (Aikman, 2007; Rao and Sweetman, 2014; Stromquist, 2001; Subrahmanian, 2005). In order to assess education as a process that produces genuine equality and development and to capture the relational aspects of gender equality as experienced in schools, researchers need to analyze the content and processes of education that perpetuate gendered stereotypes and inequalities, instead of relying on tangible, easily quantifiable outcomes (Subrahmanian, 2005). This is what Rao and Sweetman (2014) call the "quality education agenda" (p.7).

As previously mentioned, gender is a relational concept and therefore should be approached as such when evaluating the presence of gender equality in a classroom. The process of gender socialization – through which people learn and acquire the characteristics of a social group to which they belong – is an important element to consider when developing more qualitative ways to measure gender equality in schools (Molla, 2016). The interactions between

educational actors (students and teachers) are an everyday occurrence in school and have an immense impact on how boys and girls internalize gender roles and biases, and therefore should be of greater focus in the debate surrounding gender equality and education (Jha and Shah, 2020). Education, like gender, is not a static condition but an evolving and culturally-relevant process that requires using a more comprehensive, qualitative lens when assessing its impact on gender equality and development (Janigan and Masemann, 2017; Molla, 2016; Subrahmanian, 2005). The use of qualitative indicators to complement quantitative measurements in a gender analysis paints a more holistic picture of the learning and knowledge-creation process and provides insight into the contextual lived-realities of boys and girls in schools (Janigan and Masemann, 2017). Noting this need for qualitative, relational studies in the intersection of gender equality and education, this dissertation aims to narrow the gap through the production of a qualitative evaluative tool that frames classroom relations as a central element of analysis, using a gender lens.

Regional Debate: Freire's Critical Pedagogy

"Education perpetuates inequalities unless conscious attempts are made to do otherwise" (Rao and Sweetman, 2014, p.17).

Paulo Freire is arguably the most prominent Latin American educator and philosopher whose critical pedagogy has significant influence in the field of collaborative education and development. His work is often cited as a central influence on the Escuela Nueva pedagogy, as FEN Founder Vicky Colbert calls EN "Freire in the classroom" (Luschei et al., 2019, p.122). Freire's own experience with conflict, oppression, and poverty in post-colonial Brazil is evident in his work, which serves as a mouthpiece for neighboring countries in LAC whose histories are spotted with similar struggles (Darder, 2018). Therefore, Freire's pedagogy serves as a foundational framework for this dissertation as it is contextually and historically relevant to the region and to EN's own approach to cooperative, inclusive education. Several evaluations and critical analyses of EN directly or indirectly cite elements of Freire's critical pedagogy, signifying its importance and relevance to the debate on education in Latin America (Hammler, 2017; Juarez and Associates, 2003; Luschei et al., 2019; Parandaker et al., 2017).

Freire argued that education is not simply the dissemination of knowledge but a powerful tool for either social oppression or liberation, depending on how it is delivered (Hammler, 2017). He postulated that education in the traditional sense, characterized by passive, rote learning where the teacher is the sole possessor of knowledge, perpetuates hierarchal structures and power imbalances between educators and learners, oppressors and the oppressed (Freire, 1970). This 'banking model' of education, that views learners as passive and empty vessels to be filled with knowledge, creates a binary, hierarchal relationship between educational actors and quells opportunities for reflection, critical thinking, and self-guided discovery in the learning process (Darder, 2018). The hegemonic approach to education delivery exacerbates the social, political, and economic stratification in society and incapacitates citizens to challenge the structures that oppress them (ibid).

Freire's 'problem-posing' model, a critical reaction to the traditional 'banking model', is an embodiment of a collaborative and active alternative to conventional education where educational actors serve as co-creators of knowledge and interact on an equal playing field (Freire, 1970.). It places students at the center of the learning experience, recognizing the importance of their ideas and lived experiences as the foundation of knowledge production, which relates it to a constructivist approach to education (Putney and Frank, 2008). Students are active agents in their own self-discovery, and interact with their peers, teachers, and their educational environment through dynamic dialogue and critical thinking, which in turn fosters a critical engagement with the world (Berthoff, 1990; Luschei et al., 2019). Freire's process of conscientization or "knowing that you know" is one through which a student develops a critical awareness, recognizes their position in the world, and gains the skills to question the obvious and underlying structures that disempower them (Darder, 2018; Luschei et al., 2019). These collaborative interactions have the potential to construct more equitable relations outside of the classroom and to transform the relationships between educators and learners (oppressor and the oppressed), dissolving the barriers of inequality and exclusion (Freire, 1970). As Freire contended, education must be approached as a continual process of knowledge production, rather than through a reliance on achievement and educational outcomes, which is the central argument in the recent "quality education agenda" debate and this dissertation (ibid.).

However, it is important to note the limitations proposed by Freire's pedagogy, considering the context and the time in which it was written. While Freire's *Pedagogy of the Oppressed* (1970) was a seminal work in the field of alternative education and development, it is restrictive as it

only addresses the dichotomous relationship between the oppressed and the oppressor, in a political-economic sense. As Carbajal-Padilla (2016) argues, Freire did not consider the heterogeneity of classrooms that exist in many societies; there are several horizontal inequalities that must be addressed - race, class, gender, ethnicity to name a few - that Freire's pedagogy simply does not confront (Darder, 2018). Considering the rich cultural and ethnic diversity that can be found in both rural and urban classrooms in Colombia and many developing countries today (Radinger et al., 2018), Freire's pedagogy should only serve as a foundational framework, as it does in this dissertation, and must be adapted to the context in which the classroom is situated and recognize modern educational challenges that are presented.

Regional Debate: Convivencia

Convivencia is:

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...the art of learning to live together (Montaño, 2021).<sup>3</sup>
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...harmony, respect, cooperation, support, diversity, and democracy (Castro, 2021).

...the functioning of different dynamics and the understanding of one another and working together (Jiménez, 2021).

...recognizing and respecting differences (Castro, 2021).

...an active, lived concept, not a passive one (Arboleda, 2021).

...la vida sana (the healthy life) (Castro, 2021).

What is convivencia?

Clearly, there is no one "right" way to define *convivencia* which is literally translated to "to live together" in English; but coexistence only scratches the surface of the complexity and the nuance of *convivencia*. Perhaps the best, simplistic definition that encapsulates the nuances of the varied responses that my interviewees presented is Perales Franco's version: "the engaged and meaningful coexistence relationships between humans" (2018, p.889). *Convivencia*, much like gender equality and inclusion, is a holistic idea where differences are not only accepted, but respected and embraced as strengths, which is an essential element in creating spaces that are gender-inclusive and appreciative of gendered differences (Castro, 2021; Montaño, 2021).

³ All translations from Spanish to English are my own.

While similar notions exist in other societies, such as *ubuntu* in sub-Saharan Africa (Luschei, 2016), *convivencia* is unique to the Latin American context and therefore offers a regionally-contextualized lens of analysis of gender equality and collaborative education for this dissertation. In Chapter 4, *convivencia* will serve as an organizing principle for analysis, as it is a context-specific notion that is integral to ENA's pedagogy of inclusive and collaborative education.

Convivencia Escolar (school convivencia)

The notion of *convivencia* has been foundational to the way of life in Latin America for years; however, it has only come to the forefront in Colombian educational reform in the last 10-15 years, perhaps coinciding with the drawn-out, turbulent peace process between the Colombian government and the Revolutionary Armed Forces of Colombia (FARC) and the de-escalation of violence in Colombian society (Arboleda, 2021). *Convivencia escolar* is taught through both official and informal curriculum in schools and focuses on bettering interpersonal relationships and interactions between educational actors (Carbajal-Padilla and Fierro Evans, 2019; Perales Franco, 2018). Carbajal (2018) distinguishes between two types of *convivencia escolar*:

Narrow: instrumental approach to convivencia as a tool for peace-*keeping* (negative peace) and conflict management. Temporary in nature and restrictive in scope.

Broad: using convivencia as a guiding, core principle of pedagogy and curriculum through teaching concepts of inclusion, diversity, and participation. Highlights the need for peace-*building* (positive peace) and lasting social transformation in the classroom.

For the purposes of my argument, I will employ Carbajal's concept of *broad convivencia* escolar that promotes peacebuilding, inclusion, and understanding in the classroom and frames convivencia as a "way of educating and a goal of education in itself" (Perales Franco, 2018, p.893). As ENA serves to transform the classroom into a safe and inclusive space for all learners, the notion of convivencia escolar is extremely relevant to the discussion of how its model creates a peaceful gender-equal environment. Carbajal-Padilla and Fierro Evans (2019) and Perales Franco (2018) connect convivencia escolar to the campaign for education for

human rights, highlighting the power of education to be inclusionary and liberating, much like Freire's problem-posing model and critical pedagogy. *Convivencia escolar* facilitates horizontal relationships between educators and learners through elicitive pedagogies that place the student at the center of the learning process and promote critical thinking and collaboration, eliminating discriminatory barriers between educational actors and their educational environment (Carbajal, 2018).

Discussion: Filling in the Gap

The literature surrounding *convivencia* and *convivencia escolar* focuses on notions of inclusion, democracy, and the appreciation of diversity as the propellers of equality in broader society (Carbajal, 2018; Carbajal-Padilla and Fierro Evans, 2019; Díaz-Aguado and Seoane, 2011). However, this growing body of literature tends to focus on ethnicity/race as the sole basis of discrimination, leaving a glaring void in the discussion as it relates to gender. Aside from Díaz-Aguado and Seoane's (2011) contribution, not much literature focuses on the relationship between *convivencia escolar* and gender equality in LAC and the rest of the world, exposing a gap in the analysis. As gender is one of the most blatant and universal bases of discrimination (UNICEF, 2017), it is important not to overlook its relationship to *convivencia escolar* and how *convivencia* can promote gender equality, as well as equality on other bases, in society. For example, *convivencia* can be utilized as a tool to discourage gender based violence (GBV) and others forms of discrimination against girls and women, especially in *machista* societies as it teaches respect, acceptance of difference, non-violent behavior, and conflict resolution (ibid.).

This gap in the literature serves as the central motivation behind my research project with FEN and this dissertation. This analysis inserts itself into the existing global and regional debates on this topic by offering a contextualized, qualitative methodological framework that aims to accurately capture the complexity of the quantity versus quality of education debate. It seeks to illustrate the quality of the educational experience offered by the ENA model and how this experience is enhanced through the integration of *convivencia* and collaborative, experiential practices as proposed by Freire. Freire's critical pedagogy and *convivencia* are both strongly rooted in LAC and are therefore more relevant to the lived-realities of the rural Colombian teachers and students whom this study observes. Applying this hybrid framework allowed me

to focus on the interpersonal relationships between educational actors and their educational environment, emphasizing the importance of qualitative observations in the evaluation of classroom gender equality. Capturing the nature and quality of the classroom experience helps paint a realistic and holistic picture of collaborative education's role in promoting or hindering gender equality, rather than solely relying on quantitative data and indicators that may give a false sense of gender equality. Chapter 4 serves as a practical application of the ideas from the conceptual framework.

METHODOLOGY

"Culture is what happens to you when you encounter differences, become aware of something in yourself, and work to figure out why the differences appeared. Culture is an awareness, a consciousness, one that reveals the hidden self and opens paths to other ways of being" (Frank, 1999, p.2).

Introduction

This chapter details the foundational methodology of the dissertation, explains the research methods employed during the project, and explores my positionality as a researcher and the limitations encountered during remote research. The main takeaway is that methodology is central to designing evaluation tools and requires careful intention and thought behind each step (King et al., 2013). Therefore, this chapter serves a significant purpose in the development of the analysis.

Methodological Inspiration: (Digital) Educational Ethnography

Educational ethnography serves as the methodological inspiration for this dissertation as it is a flexible, human-centered approach that incorporates various methods that were possible during this unique time for field research (Frank, 1999). Given that my research was conducted on a completely remote basis due to COVID-19, I had to adapt this methodological approach to reflect more of a digital ethnography (in the simplest sense, given my limited timeframe and resources for remote research), rather than an in-person 'traditional' educational ethnography. Digital ethnography, according to Pink et al. (2016), follows similar practices of traditional ethnography in that it involves "watching what happens, listening to what is said, and asking questions" but these practices are conducted using digital media methods, making the ethnographic process more adaptable to today's evolving digital society (p.21). Digital ethnography explores "how the digital has become part of the material, sensory, and social worlds we inhibit" (ibid., p.7), making this methodology a perfect avenue for the type of research conducted. Through virtual classroom observation and conducting semi-structured interviews over digital platforms, I familiarized myself with my research participants and their

practices and behavior, all while being 2,000 miles away from the rural Colombian classrooms I observed.

Furthermore, educational ethnography is an appropriate approach to a project that centers on observing human interaction and power (im)balances. Educational ethnography focuses on the relationships between observed educational actors, builds cultural and contextual awareness, and requires a great degree of reflection on one's own preconceived notions and positionality. (Putney and Frank, 2008). As gender and gender equality are relational, socially-constructed issues, educational ethnography provides researchers with the tools to explore interpersonal relations and calls attention to the spoken and unspoken values and norms in a classroom that may perpetuate inequalities (Frank, 1999). Frank suggests that educational ethnography is an insightful tool for classroom observers to record and analyze the unique classroom culture that the educational actors create and reveals how classrooms serve as "mini cultures" that reveal truths about broader society (ibid.).

Research Methods

Reflexive exercise - revealing preconceptions and positionality

Before beginning the classroom observations and creating an evaluative rubric, it was imperative for me to confront and uncover any preconceived notions or personal biases regarding gender and gender equality that could affect my research journey. As Chiseri-Strater (1996) suggests, "a major goal of the [ethnographic] research process is self-reflexivity" which helps the researcher "turn it upon" themself to assess their subjectivity and positionality as an outsider (p.119). To unveil my potential cultural biases, my FEN supervisor asked me to create a preliminary rubric with indicators that I believed would accurately assess the level of gender equality in the classroom. After reviewing this exercise with her, it was obvious that my experience as a former educator in monograde primary classrooms in Spain, Mexico, and the United States influenced my interpretation of how gender equality presents itself in the classroom. While I included indicators such as 'male and female students raise hands at equal rate' and 'teacher uses gender-inclusive terms to address the class and students', these indicators were not as appropriate for the Colombian multigrade context considering that most class time was spent working in groups (rather than whole-class activities) and the Spanish

language uses gendered pronouns, unlike English. In this context, teacher-student and student-student collaboration and group-work should be a central focus of the rubric, as collaboration is in the lifeblood of multigrade classrooms, whereas it is not as natural in monograde classrooms (Arboleda, 2021; Colbert and Arboleda, 2016). I was pushed to challenge these notions throughout the research process in order to design a more contextualized and culturally-appropriate set of indicators in later iterations of my rubric (described in Chapter 4).

Semi-structured informant interviews

Although my original research plan set out to interview EN teachers, students, and parents for this study, it soon became obvious that conducting interviews over virtual platforms would not be feasible for participants who lived in rural, disconnected areas of Colombia. Therefore, I turned to my FEN colleagues for their insight as education professionals and native Colombians to gain cultural and experienced perspectives on my research topic. Each interviewee was provided with a University of Edinburgh-approved Participant Information Sheet and Written Consent Form before the conversation and also provided verbal consent at the start of each interview. These conversations took place over Zoom or Google Meet and lasted anywhere from 30 to 120 minutes. Interviews took place in both English and Spanish, depending on the preference of each participant and were recorded for transcription purposes; recordings were stored in a password-protected computer and decoupled from any identityrevealing information. Through these 11 conversations, I developed an understanding of the Colombian perspective on the nuanced and complex concepts such as convivencia and gender equality and compared these perspectives to my own ideas as an American as a reflexive exercise. As Frank (1999) suggests, there is no 'right' view of reality, and multiple perspectives help inform the creation of rigorous and reliable evaluative tools (p.4)

Virtual classroom observations

Since traditional in-person classroom observations were not possible during the pandemic, FEN offered me the opportunity to conduct virtual classroom observations using pre-recorded videos that were originally filmed as part of an Inter-American Development Bank (IDB) project that took place in 2018-2019. Gaining access to these videos was an administrative challenge for FEN and being granted access was considered *un lujo*, a privilege, that very few researchers will ever have. IDB collaborated with FEN to record EN-trained teachers

(Treatment) and *normalista* teachers (Control) in order to assess teacher instruction quality based on the CLASS rubric, an evaluative system used in classrooms in 50 countries globally (Aguilar, 2021). Teachers in the Treatment group received formal ENA pre- and in-service training including two one-week long training workshops and received six observation visits (whenever possible) from FEN's teacher-training team while Control teachers did not receive any formal training over the project's 18-month duration. Each classroom was filmed twice, (once in 2018, once in 2019 where possible) for three hours, focusing on teacher-student interactions. Repurposing these videos for a gender analysis positioned me as a 'fly on the wall' instead of an interactive in-class participant as in traditional classroom observation (Frank, 1999); this presented both opportunities and challenges that will be discussed in the Research Limitations section of this chapter.

From the group of 197 classes filmed in 2019, I randomly selected five Treatment (ENA) and five Control (*escuelas normales*) classrooms, one from each of the four rural municipalities and a fifth from a randomly selected municipality, to observe (see Table 1 and Figure 2). As recommended by the CLASS framework and by the FEN Project Coordinator, Angélica Aguilar, who worked on the project with IDB, I watched three 20-minute segments of each video to avoid observation fatigue and to get a sense of the classroom rhythm in the beginning, middle, and end of each class (Aguilar, 2021). During the first round of observations, I followed the process of what Frank (1999) calls note-*taking*, or an objective recording of what I saw and heard (see Appendix A) in order to avoid making unfounded, interpretive judgments during the observation. This first round of observation notes later served as evidence for the note-*making* stage which will be described in the next chapter.

Table 1: List of classrooms observed

Class	Municipality	Department	School Name	Observation Date
T1	Boyacá	Valle de Tenza Escuela Gaunza Abajo		27-Aug-19
C1	Boyacá	Saboyá	Escuela Escobal Bajo	20-Aug-19
T2	Cundinamarca	San Bernardo	Escuela Rural San Miguel	25-Oct-19
C2	Cundinamarca	Nocaima	Escuela Rural La Libertad	24-Aug-19
T3	Santander	Oiba	Escuela Rural Pedegral	11-Sep-19
C4	Santander	San Andres	Escuela Rural Labranzagrande	5-Sep-19
T4	Tolima	Falan	Piedranegra	21-Oct-19
C4	Tolima	Villa Hermosa	Primavera Baja	15-Oct-19
T5	Boyacá	Valle de Tenza	Escuela Munata	30-Aug-19
C5	Tolima	Villa Hermosa	Palosanto	15-Oct-19

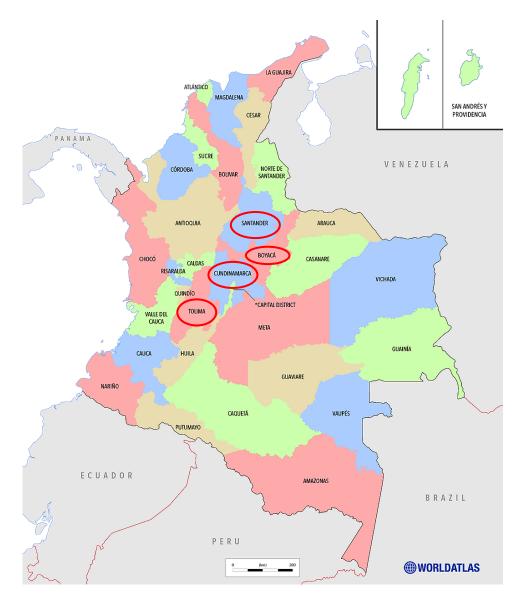


Figure 2: Rural municipalities where classroom observations took place.

Source: World Atlas, 2021

During my observations, I paid critical attention to student-student and student-teacher interactions, as these elements would serve as the foundation for the development of rubric domains and indicators during the second round of observations. Additionally, I practiced classroom mapping by drawing diagrams of each classroom and how the physical features (desks, boards, chairs, etc.) were organized (see Appendix A); the use of space, Frank (1999) argues, exposes implicit norms and patterns in the classroom that otherwise might go unacknowledged. Noting how educational actors relate to their educational environment for social and academic use is an extremely relevant step in capturing the quality of the classroom experience, which is a top priority of this dissertation (ibid.). Noting the 'material culture' of ENA tools such as the friendship mailbox and collaborative seating was critical to evaluating how ENA promotes inclusive and gender-equal learning environments for boys and girls, since

the classroom environment is the first aspect to change during the holistic transformative process ENA wishes to facilitate (Heath, 1982; Aguilar, 2021).

Research Limitations

It goes without saying that there were several obstacles that arose from conducting remote ethnographic research during a pandemic; although these limitations may have curtailed the depth of my data collection and analysis, they can also be seen as unique opportunities to be creative in designing an evaluative tool from repurposed observation material.

The nature of remote research prevented me from stepping foot into the rural classrooms, so I was unable to form personal connections with my research participants which are so central to ethnographic research (Pink et al., 2016). Having to rely on previously-recorded videos was not conducive to engaging with the teachers or students to ask further questions or to observe how these classrooms were connected to the school and surrounding community. I also acknowledge that these videos were originally filmed for a specific purpose and focused on the teacher as the principle actor, placing less emphasis on the students' role in the classroom; therefore, there was an inherent bias in the way in which the classrooms were filmed, as they constructed as specific narrative. To combat this bias, I paid specific attention to studentstudent interactions that occurred in the periphery and background of the camera frame. Additionally, since this study observed only one hour from an entire school year, it was hard to gain a comprehensive in-depth understanding of the nuances and complexities of each classroom "mini culture", as there is a learning curve to class observation before an observer can truly understand the interworking of a classroom (Frank, 1999; Putney and Frank, 2008). Considering this, it was extremely important for me to avoid making generalizing statements, assuming that all Treatment or Control classrooms operated similarly to the ten classrooms in my analysis (Heath, 1982). Through this process, as a classroom observer, I was challenged to find a balance between power and vulnerability as an outsider and to retell, not reconstruct, the narratives I observed (Gordon et al., 2005).

Another limitation I encountered was time. Having only four weeks for classroom observation (as I did not receive access to the videos due to administrative obstacles until Week 3 of my placement), I was not afforded enough time to thoroughly develop and test an evaluative tool.

Rubrics are generally created over months or years of observation, of which I simply did not have. That being said, rubrics are always a work-in-progress, and are continually tested and tried to develop reliability and rigor so that they can be used in various classroom settings (Allen and Tanner, 2006). Therefore, the resulting instrument is far from finalized but serves as an introductory and exploratory framework for FEN and other organizations to use and adapt in future research endeavors.

The limitations I encountered forced me to be creative to work around the obstacles that were presented, requiring me to use my available resources and knowledge of the topic to develop a unique approach to digital educational ethnography and remote classroom observation. My resulting methodology can be considered more flexible in nature and open to interpretation by future researchers and experts. The framework proposed in the following chapter helps establish the foundation for future gender research in collaborative learning environments and contributes insight to what seems to be an understudied field. Lastly, this project showed an alternative use for the IDB videos that were a huge investment of time and money for the organizations involved. Watching these videos through a gender lens serves as a valuable learning tool for FEN who may want to glean more insight on various topics from these videos in future projects.

ANALYSIS: DEVELOPING AN EVALUATIVE TOOL

Introduction

This chapter will explore the development of the qualitative evaluative tool, the gender equality

rubric, and contribute to the quantity versus quality of education debate. It argues that in order

to capture the lived-realities and true educational experiences of boys and girls and to

effectively evaluate the degree of gender equality in the classroom, researchers must use a

variety of methods and tools, both quantitative and qualitative, to produce a more

comprehensive evaluation of gender equality, as proposed by authors including Rao and

Sweetman (2014), Subrahmanian (2005), and Perales Franco (2018).

Step 1: Note-Making

The first step after the first round of observations and note-taking was what Frank (1999) calls

'note-making'. Note-making is an ethnographic process that involves making interpretive

judgements and analysis from evidence discovered during note-taking; Frank recommends

speaking from evidence, not reactive judgement, in order to make sound conclusions about a

classroom's culture (ibid.). For the purposes of this analysis, note-making aimed to interpret

notes from the first round of observations to glean what seemed most relevant and important

in classroom observations and to create contextual, gender-sensitive rubric indicators. The

following is an example of note-taking and note-making from Classroom T2:

Note-taking:

(00:04:17) Students and teacher form circle

to play game...taking turns. Teacher asks

students to raise hands to participate.

Note-making:

Male and female students are equally

balanced and placed around the circle.

Students take turns and respect each other,

practicing convivial behavior which is

possibly connected to Teacher's reference

to the pacto de convivencia later in this

activity.

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Similar to the initial reflexive exercise, this process required a high degree of critical thought and reflection on my end, as gender-sensitive indicators should be founded on and relevant to "unique local conditions" and feasible to particular services offered by the schools observed (Hochfeld and Bassadien, 2007). The note-*making* process was influenced by conversations I had with FEN inoculators and through a literature review of existing rubrics and indicators focused on gender equality and inclusion, as I wanted to ensure the indicators were as relevant and contextual as possible to the developing-world and Colombian context to keep cultural biases at a minimum (UNGEI, 2021). For example, while some classes seemed noisy and disorderly from an outsider's perspective, interviewees informed me that this perceived 'chaos' was not only characteristic of multigrade classrooms, but intentioned by the ENA model which encourages lively interaction between students (Aguilar, 2021; Arboleda, 2021). Therefore, I refrained from interpreting a noisy class as chaotic or misbehaved during note-*making*. The reflexive process presented a multiplicity of perspectives that helped my note-*making* become more comprehensive and inclusive of various interpretations of gender equality.

Step 2: Rubric Creation

"Rubrics offer a road map for identifying and defining: the things that matter; important criteria to guide evaluative judgments; the credible evidence needed; the selection of methods; overall evaluation design; data analysis and synthesis and finally reporting" (King et al., 2013, p.14).

Creating a rubric was an iterative and reflective process that took place over five weeks during my placement with FEN. Through this process, I developed a set of gender-sensitive indicators that was revised multiple times so that it was more succinct and contextualized to the rural, multigrade Colombian context. I received feedback from my FEN colleagues and interwove their suggestions into a finalized rubric that comprised of two domains and six of the most important and relevant indicators based off of my note-*taking* and note-*making* of the ten classrooms observed. The third portion, Classroom Environment, was developed to indicate the degree of ENA implementation in Treatment and Control classrooms and to make the connection between the ENA model and the gender-sensitive indicators of the two domains (See Figure 3 for the finished blank rubric and Appendix A for a completed rubric). Finally, to determine the degree of gender equality for gender-disaggregated indicators, tallies were

divided by the number of males and females in the classroom, respectively, and multiplied by 10 to get a more substantial value. In the following section, each indicator of the rubric will be illustrated by a vignette from a classroom observation and is followed by an analysis of how the indicator relates to *convivencia*, gender equality, and inclusion.

Figure 3: Final gender equality rubric

Domain: Teacher	High degree	Medium degree	Low degree	Evidence: behavioral markers
T devotes attention to groups				
T calls on S to participate				
T elaboration				

Domain: Student	High degree	Medium degree	Low degree	Evidence: behavioral markers
Peer-Peer collaboration				
Turn-taking				
Student leadership opportunities				

Classroom environment	High degree of implementation	Medium degree of implementation	Low degree of implementation	No implementation	Instruments/Examples
Use of and access to ENA instruments					
Classroom organization					

Domain 1: Teacher

In conventional classrooms, teachers serve as the centerpiece of knowledge production and delivery (Freire, 1970). Conversely, in classrooms that integrate collaborative pedagogies such as ENA, the teacher transforms into a facilitator, acting as a co-creator of knowledge, exemplifying a horizontal relationship that challenges the power hierarchies produced through traditional pedagogies (Colbert and Arboleda, 2016). The teacher's equally-important role in the ENA classroom inspired the creation of the first domain for the gender equality rubric. The IDB project, for which the videos were originally filmed, focuses on teacher-student interactions, so it was appropriate to create a domain centered on the teacher and how (s)he interacts with students. The indicators in this domain explore how the teacher facilitates

collaboration, cooperation, and critical thinking to ensure students are engaged with one another in an environment that promotes notions of *convivencia*, inclusion, and equality.

Indicator Te1: Teacher Devotes Attention to Groups

The teacher pulls up a chair, sits down with Table 3, and tells them they are going to play a reading game. It's a "hot potato" style game where students left with the hot potato have to read aloud to the class. After two students are left with the potato, they play a third time, and the teacher gets the potato. She sits back and reads a fable aloud in an animated, warm voice, captivating the students. (2:44:42)

Te1 captures the degree of engagement of the teacher with their students and exemplifies elements of *convivencia*, collaborative learning and teaching strategies, and the teacher's role as co-producer of knowledge as Freire described in his problem-posing pedagogy (Freire, 1970; Darder, 2018). In this vignette from Classroom T4, the teacher displays high-quality engagement with students, inserting herself directly into the classroom activities and acts as a student herself to facilitate an equal partnership between herself and the students. In other segments of the observation period, she roams around the classroom and demonstrates high-quality, extensive interactions by asking both groups of students and individual students if they need help and by checking on their progress.

Although this indicator may not seem to directly correlate with gender equality, it seeks to capture the amount of attention the teacher pays to students, both males and females. When teachers engage with students and tend to their individual learning needs, they deliver a quality education to students and create equitable learning environments that respect the diverse learning needs between boys and girls (Subrahmanian, 2005). An important characteristic to note in multigrade classrooms is the varied learning capabilities and needs of students who coinhabit the same space but are in different grade levels (Juarez and Associates, 2003; McEwan, 2008); it is therefore critical for teachers to give all students attention, regardless of gender, in order to promote forward learning progress and tend to any struggles they may experience.

Indicator Te2: Teacher Calls on Students to Participate

The class period begins with reading the Classroom Rules. After reading the first rule, the teacher calls on 7 students to read the subsequent rules, alternating between male and females. All classroom rules relate to convivencia – greet your classmates, respect each other, obey the rules, practice tolerance, respect turns, be organized, give thanks. After each rule, the teacher asks students to raise their hands and contribute what each rule means to them. (0:00:11)

A more widely-used indicator related to gender equality, Te2 examines the frequency of which the teacher calls on students to participate in and contribute to classroom activities and the frequency they call on males versus females. This example from Classroom T4 encapsulates the practices of *convivencia escolar* and gender equality, as the teacher gives male and female students equal treatment and opportunity to participate in the exercise and asks them to take turns sharing their personal opinions and ideas (Subrahmanian, 2005; UNICEF, 2017). Classrooms where teachers frequently call on students are more likely to be collaborative and inclusive, since teachers acknowledge the role of students as co-producers of knowledge and do not dominate the learning process through the use of lecturing or rote teaching strategies that disengage the student (Freire, 1970). Active and cooperative learning strategies challenge traditional methods of teacher-centric delivery and encourage students to feel comfortable to participate and contribute their thoughts and experiences, fostering a space in which both male and female students feel empowered to express themselves (Bonwell and Eison, 1991; Johnson et al., 1994).

It is worth noting that in developing this indicator, I first incorporated a behavioral marker that recorded the teacher's use of gender-charged terms, such as 'mijo/a' (my boy/girl) and 'mi amor' (my love), instead of names, when calling on students; however, after speaking with multiple FEN colleagues and reflecting on the gendered nature of the Spanish language, I decided against using this marker as it would have represented a cultural bias that was not contextually relevant to the observed classroom environment.

Indicator Te3: Teacher Elaboration

The teacher sits down with students at Table 1 and asks Carolina, a female student, to read aloud from the ENA guía about indigenous myths and local traditions. After Carolina finishes reading, the teacher asks the students, "What did your parents teach you about who created the sun, moon, and Earth?", the students respond "gods" and the teacher retorts "one god or many gods?". The teacher then asks students "what legends have you heard before?" and a male student raises his hand and talks about Madre de Agua (Mother of Water). (0:16:46)

This interaction between the teacher and students in Classroom T2 manifests Freire's problem-posing pedagogy and the *conscientization* process, both of which critical elements in collaborative education models such as ENA and to fostering inclusive learning environments. The teacher expands on the reading material, asks students follow-up questions, and encourages students to connect the material to their own lives, initiating a process of self-discovery and critical thinking. She uses comprehension questions as opportunities to elaborate, involving students in the knowledge-creation process. As Durrani and Halai (2020) suggest, critical thinking is a central process in creating gender-equal learning environments, as pushing students to think deeper allows them to challenge socially-accepted norms and gender stereotypes that they experience outside of the classroom. Through *conscientization*, students develop a sense of knowing their place in the world and are led to question the injustices they experience (Luschei et al., 2019). *Conscientization* also allows students to use their lived-experiences to produce knowledge through *praxis* (a process of action and reflection), emphasizing the importance of both boys' and girls' personal contributions in the learning process (Berthoff, 1990; Freire, 1970).

Teacher elaboration also facilitates dialogue between educational actors, which Berthoff (1990) and Darder (2018) argue is essential in the collaboration process. Darder (2018, p.126) states:

It is only through dynamic engagement of the world, by way of critical thought, that we unveil reality, unmask the myths that obscure oppression and continue to generate and regenerate our critical faculties.

By expanding on ideas presented in the ENA *guias* and facilitating didactic dialogue, the teacher presents an opportunity for students, both male and female, to go beyond and explore new avenues of thinking and knowledge production. Although this example of critical thinking may seem quotidian, development of non-cognitive, critical thinking skills in the classroom may lead to larger realizations that challenge discriminatory and exclusive practices and behavior outside of the classroom (Durrani and Halai, 2020).

Domain 2: Student

Since this study aims to assess the student experience through a gender lens, it was essential to prioritize students as a separate rubric domain. Student-centric pedagogies like Freire's and ENA emphasize the role of students as knowledge producers and highlights the importance of accepting students' experiences as the foundation of their education (Colbert and Arboleda, 2016; Freire, 1970; Hammler, 2017). Students are also essential agents in creating equal and inclusive learning environments and the interactions between peers reveals truths about the broader trends of gender equality in society in the way they are socialized in institutions and how they embody or challenge traditional gender roles (Molla, 2016). It is imperative to evaluate peer-peer interactions and how students practice *convivencia* (read: acceptance, tolerance, and respect) between each other (Carbajal, 2018). The indicators in this domain focus on how students play a role in promoting *convivencia* and gender equality, learning to recognize and embrace differences amongst themselves and to practice democratic and inclusive behavior in school.

Indicator S1: Peer-peer Collaboration

One male and one female student at Table 2 distribute ENA guías to peers and begin working together. They delegate roles to read aloud and to scribe for the activity. Students at Table 1 are also working together, sharing and pointing to the guía; one female student is helping her male groupmate in the activity. Students work quietly, but collaboratively, while the teacher works with the male student at Table 4 on an activity since he does not have any groupmates. (0:10:00)

S1 is arguably the most indicative and important indicator that lies at the heart of ENA and other cooperative pedagogies and connects directly to this dissertation's central themes of gender equality and *convivencia*. This example from Classroom T2 illustrates ENA in action; students work autonomously in groups, without relying on teacher direction, delegate responsibility, and tend to each other's needs. Interdependence, a central element to *convivencia*, is facilitated through collaboration and increases student autonomy, solidarity, and cohesion (Carbajal-Padilla, 2016; Freire, 1970; Jensen et al., 2016). Perales Franco (2018, p.892) suggests:

Convivencia assumes to fulfill a double mission: to teach the diversity of the human species and contribute, at the same time, to an acknowledgement of the similarities, differences, and interdependence of all human beings.

The processes of peer revision and accountability encourages students to learn to respect each other's opinions and to work toward a common goal (Okojie and Boulder, 2020). As Carbajal-Padilla and Fierro Evans (2019) argue, student collaboration leads to open-mindedness and acceptance of difference, which are important in facilitating *convivencia* and gender equality, and encourages mutual respect, regardless of perceived differences between males and females. Embracing diversity, various perspectives, and differing opinions is critical in promoting *convivencia* in schools and in broader society and can be tied to notions of equality and inclusion.

Indicator S2: Turn-taking

At the start of class, the students and teacher form a circle and play a dynamic learning game. The teacher explains the rules and then asks students to lead and participate in the activity, taking turns. The teacher emphasizes the importance of raising hands, referring to the pacto de convivencia. Both male and female students raise their hands at equal frequency and take turns directing the activity, calling on their peers to lead the next part of the game. (0:04:17)

Turn taking is a direct reflection of democratic behavior, which is a main tenet of *convivencia*, and instills notions of respect, tolerance, and inclusion (Díaz-Aguado and Seoane, 2011). As

my interviewees purported, in classes where students take turns participating and contributing, students demonstrate a higher degree of respect for their peers and their ideas and opinions (Arboleda, 2021; Castro, 2021). The student experience is affected by the way in which peers interact, engage with one another, and respect each other so it is important to consider the frequency in which they take turns and *how* these turns are taken (Carbajal, 2018; Stromquist, 2001). Do students raise their hands to contribute or do they interject and speak over each other? These methods of communication and interaction are critical to discern whether or not students respect each other, and insightful to the how male and female students regard each other either as equals or in a power imbalance (Gordon et al., 2005). Additionally, turn-taking may indicate the degree of student engagement in the learning process and sheds light on participation rates between male and female students; these phenomena are closely related to gender-equal and inclusive practices in the classroom (UNGEI, 2021).

Indicator S3: Student Leadership Opportunities

Before the group activity, the teacher distributes three different colored flashcards (pink, green, blue) to each table and tells each student to pick a flashcard. After all students have cards, she assigns corresponding roles (secretary, spokesperson, leader) to each color, which will be the students' roles throughout the class period. Roles are assigned randomly and males and females share all roles. The teacher asks secretaries to retrieve letters from the friendship mailbox and distribute them amongst their groupmates. (0:17:00)

This snapshot from Classroom T1 embodies a core principle of ENA – student governance and leadership – which centralizes the students' role in the classroom as decision-makers and agents of democracy. The random assignment of classroom roles exemplifies fair and equal treatment towards males and females and offers all students equal opportunities to hold leadership positions, which is a crucial element to achieving gender equality (Subrahmanian, 2005). Teaching all students how to be leaders builds capacity in young learners, teaches them responsibility and accountability, and fosters respect for peers as capable leaders, regardless of gender. Although students were not assigned roles in this fashion in every Treatment classroom observed, other instances of student leadership - recording their own attendance leading classroom prayers and dynamic exercises, and presenting in front of peers - were universally evident. By including all students in democratic processes, ENA develops non-cognitive skills

that teach students to be active and engaged citizens who exercise *convivencia ciudadana* (citizenship convivencia) (Carbajal-Padilla, 2016). Furthermore, Hammler (2017) and Parandekar et al. (2017) both found that females dominate student government roles in ENA schools in Colombia and Vietnam, respectively, perhaps indicating that ENA has a heavy hand in promoting gender equality as compared to conventional schools.

Step 3: Examining Space - Classroom Environment

An extremely important element to consider when assessing gender equality in the classroom, especially in ENA classrooms, is the use of space and how educational actors interact with their educational environment. Frank (1999) emphasizes the role that space plays in creating collaborative and inclusive classrooms, suggesting that observers practice classroom mapping to help uncover implicit classroom norms and patterns. It is important to pay attention to how students' desks are organized; the availability and accessibility of resources; the use of space for academic and social purposes; and the mobility of classroom furniture to facilitate interactions between classroom actors (ibid.). In the case of Treatment classrooms, it was imperative to take note of these aforementioned elements in addition to the presence and incorporation of ENA tools – self-recorded attendance, resource corners, friendship mailbox, classroom rules, etc. – to determine the degree of implementation of the ENA model. Through classroom mapping, I was able to glean important information regarding how students and teachers interacted with the physical classroom artefacts, or "material culture", and how these

Classroom Rules Ask for permission to speak T desk Board Respect your classmates' opinion Be punctual (Free space used for activities) Be organized Ask for permission to leave the classroom Self-recorded attendance F M Suggestion box - used in guía activity Traveling journal - used in guía activity Friendship mailbox ENA hopscotch diagram M F M Reference to classroom committees and pacto de convivencia Resource corner, classroom library ENA guides - shared between 2-3 students

Figure 4: T2 classroom map

interactions either promoted or hindered gender equality and inclusivity in the classroom (Heath, 1982). Uneven availability and access to resources and use of social space may expose social hierarchies between teachers and students, males and females, suggesting power imbalances rather than the horizontal relationships for which Freire advocates.

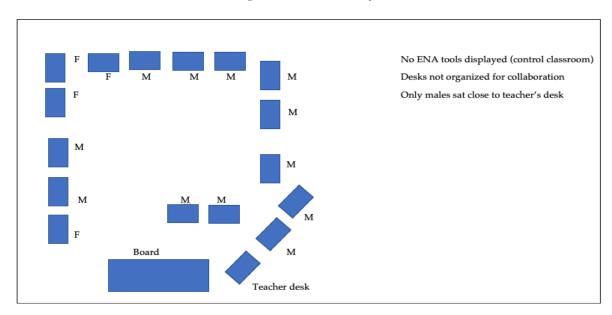


Figure 5: C4 classroom map

Classroom T2 (Figure 4) embodies the ideal ENA classroom setup: tables are organized in groups to facilitate collaboration, ENA tools are present, accessible to both males and females, and effectively incorporated into the lesson plan, and students utilize space for social activities such as the group prayer and opening game. In contrast, Classroom C4 (Figure 5) is not organized to facilitate collaboration as students sit around the perimeter of the room, facing away from each other. In addition, only males are seated next to the teacher's desk (where he sits for the majority of the observation period) while three of four females are seated in the far corner, limiting female students' access to the teacher as a resource. As this is a traditional escuela normal classroom, ENA tools are not present.

Step 4: Qualitative Gender Analyses

Through the process of diligent observation, note-*making*, and classroom mapping, I created an exploratory framework for FEN in the form of a gender equality rubric. While this tool uses quantitative elements such as tallies to distinguish classrooms on a scale of "high", "medium", and "low", its indicators explore the lived-realities and complexities of the rural Colombian

multigrade classroom that are often overlooked in other educational assessment rubrics that focus on parity and educational outcomes, instead of the student experience (Stromquist, 2001). Additionally, the indicators are more contextual and nuanced, inspired by the regionally-specific notion of *convivencia escolar* and Freire's critical pedagogy, which adds depth and validity to the rubric.

The last step in the methodological process was writing up a qualitative gender analysis for each class observed to provide more context and explanation to the rubric scores. As rubrics are simplified versions of data, they only tell part of the story and often pose education as a static condition, not a dynamic process, a commonly cited issue in the quality of education debate (Hochfeld and Bassadien, 2007; Stromquist, 2001; Subrahmanian, 2005). To avoid this tendency, gender analyses were a critical component of my evaluative framework, as they explore the quality of the educational experience and tell the story behind the quantitative rubric tallies. For example, in Classroom T1, the teacher ranked "medium" in Indicator Te1, visiting groups twelve times while the teacher in Classroom C4 ranked "low" while also visiting groups twelve times (See Table 3). The qualitative analysis explains why these two classrooms ranked differently: T1 exemplified high-quality teacher-student interactions as the teacher spent substantial time with each group of students and C1 spent far less time, only briefly checking in with students and moving on to another group. The qualitative gender analyses complement the rubric proving that a mix of quantitative and qualitative evaluative tools is necessary to provide a more comprehensive, realistic picture of the educational experience of boys and girls in classrooms around the world (see Appendix A for an example of a gender analysis).

Main Findings

My research led me to conclude that the degree of ENA implementation, as researchers including Hammler (2017) and Parandeker et al. (2017) have also discovered, has a significant impact on the success of the model in promoting democratic, inclusive behavior and delivering higher-quality education. While no classrooms could be deemed gender exclusive *per se*, there was a stark difference in educational quality between classrooms where ENA tools were present and effectively utilized and those where ENA was shallowly implemented or non-existent. In addition, my investigation determined that the level of implementation also seemed

to correlate with the degree of *convivencia* and gender equality that was exercised in the classroom (see Table 3). In all but one classroom (T4), the degree of ENA implementation matched the determined degree of gender equality. Therefore, it cannot necessarily be deduced that simply having the ENA name guarantees that a classroom will be more gender-equal and inclusive; it depends on the willingness of the teacher to thoroughly implement the model and the available resources and training available to them in order to reap the maximum benefits from ENA's collaborative and active strategies. Shallow implementation, as exemplified in Classroom T5, does not produce the same results as a classroom where ENA instruments are fully integrated into classroom instruction, as in Classrooms T1 and T2. Overall, the rubric captures the heterogeneity of ENA implementation, dating back to Colombia's decentralization of the education system, and serves as a valuable tool in determining the effectiveness of ENA in promoting gender equality and inclusion in the classroom.

Class Code	Te1	Te2	Te3	S1	S2	S3	ENA / ENA Adjacent Implementation	Determined degree of gender equality
T1	Med-12 (high qual)	High-M 26.3, F 20	High - 9	Med - 11	High - M 16.3, F 30	High - 4	High	High
C1	High-40	Low-M 3.3, F 12	Med - 6	High - 24	Low - M 0, F 0	Low - 0	Medium	Medium
T2	High-23	Med-M 25, F 45	High - 9	High - 22	High - M 25, F 42.5	High - 6	High	High
C2	High-45	Low-3.3, F 3.3	High - 9	High - 14	Low - M 6.7, F 3.3	Low - 0	Medium	Medium
Т3	Low-26 (low qual)	Low- M 11.6, F 5	Low - 2	Med - 12	Low - M 6.4, F 8.3	Med - 3	Medium	Medium
C3	Med-23 (low qual)	Low- M 10, F 18	Low - 4	Low - 5	Low - M 5, F 0	Med - 2	Low	Low
T4	High-16 (high qual)	High-M 22, F 22.5	High - 15	High - 14	Med - M 20, F 10	High - 4	Medium	High
C4	Low - 12 (low qual)	Low - M 4.5, F 5	Low - 5	Low - 4	Low - M 0, F 0	Low - 1	Low	Low
T5	Med-22 (low qual)	Low- M 0, F 4	Low - 3	Med - 9	Low - M 0, F 0	Low - 1	Low	Low
C5	Low - 0	Med - M 22.5, F 10	Low - 0	Low - 4	Low - M 0, F 5	Low - 0	Low	Low

Table 2: Overall gender equality rankings of 10 observed classrooms

Furthermore, ENA and *escuela normal* classrooms in Colombia do not exist in a binary, but rather on a spectrum. While some ENA classrooms (T5 and T3) ranked "low" in several indicators, some *escuela normal* classrooms (C1 and C2) ranked "high" in some categories as they informally implemented ENA or ENA-adjacent strategies, exhibiting higher degrees of gender equality. The evaluative tool produced by this research can be useful for both ENA and *escuela normal* classroom environments, considering that gender equality is important in all education settings.

Conclusion

Chapter 4 served as the practical application of the conceptual and methodological foundations examined in the previous chapters of this dissertation. Using a combination of quantitative and qualitative instruments, this comprehensive rubric endeavors to capture the nuances and complexities of the educational experience in rural Colombian schools, and incorporates concepts such as *convivencia* and Freire's critical pedagogy to frame its relevance to regional debates. The resulting pilot framework is the first step of many for development organizations like FEN who are interested in contributing to the global debates surrounding gender equality, collaborative education, and international development.

CONCLUSION

The quality of EFA is a much needed area of research in the 21st century, as gender is receiving more attention in the field of international development and education (Stromquist, 2001). The demand for qualitative, gender-sensitive tools is ever-increasing, but according to the literature explored in this analysis, the supply remains inadequate. To address this dearth, the proposed methodological intervention pioneers an approach for FEN, serving as a capacity-building tool that illuminates the need for gender-sensitive evaluation instruments that are contextually relevant to rural, multigrade classrooms in which ENA operates. As King et al. (2013) suggest, rubrics are "flexible and adaptable and the art of working with [them] is in tailoring the approach to the evaluation context" (p.14). Therefore, it is important that this evaluative tool is tested in various rural development settings to prove its relevance, adaptability, and rigor, but the pilot framework contributes to the "quality education agenda" as proposed by authors including Rao and Sweetman (2014), Stromquist (2001), and Aikman et al. (2011). While the rubric resembles other quantitative tools that evaluate gender equality in schools, it provides a culturally-relevant set of indicators that are further bolstered by qualitative gender analyses, therefore contributing to the roadmap to bring the quality of education to the forefront of the debate. As Subrahmanian (2005) suggests, equality does not have one universal definition, so the proposed set of indicators set out to capture gender equality's nuanced complexity. Furthermore, observing and evaluating these classrooms through a gender lens and applying Freire's pedagogy and the cultural notion of *convivencia* provides a unique approach to the gender equality in education and development debate and offers a unique, exploratory framework for future research.

In essence, gender equality is a continuum, not a linear, straightforward process. The resulting framework is intended to spark conversation around the topic and to help FEN consider putting gender at the forefront of its research and initiatives. Gender mainstreaming must be a top priority if the organization wishes to enter the debate and pave the path towards equality in its schools, and the gender equality rubric could serve as a strong foundation in determining the effectiveness of such an intervention in creating gender-equal learning environments. One equality intervention, such as the one explored in this dissertation, will not independently produce gender equality, but is the impetus needed for further research and action.

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APPENDICES

Appendix A: Completed Gender Equality Rubric (Classroom T2)

	CPSBIOCTU25-2019
Video (code)	
School name/	Escuela Rural San Miguel
municipality/	Cundinamarca
department	San Bernardo
	Treatment
Treatment/Control	
	25 October 2019
Date	
	Language, Science
Subject(s)	
	20/20/20
Time observed	
	Videos, bookwork, tablet activity
Activity observed	
	F
Teacher gender	
	10 (6/4)
# of students (m/f)	
	Pre-escolar, 1, 3-5
Grade levels	

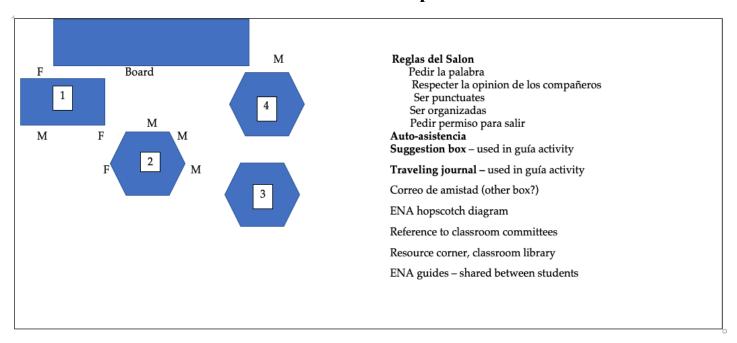
T has 7 years of experience as primary school teacher and 2 years of experience with Escuela Nueva. Attended both workshops (all sessions), 4/6 microcenter trainings and received 5/6 observation visits.

Domain: Teacher	High degree	Medium degree	Low degree	Evidence: behavioral markers
T devotes attention to groups	X			 Total: 23 T pays all groups equal attention checks group work and spends time explaining activities T engages with both M and F in groups T moves between groups frequently T is attentive to S's needs esp. students with no group-mates T sits with students when working with groups
T calls on S to participate		X		 High frequency of calling on S Calls on F more than M (M 25, F 45)* Uses M/F names at equal frequency *M vs. F – divide by number of M/F in class x 10
T engagement with S	X			 Total: 9 T frequently asks comprehension and follow-up questions T asks S to elaborate on answer with own experience or knowledge T engages in discussion with S regarding activity content + real-life application

Domain: Student	High degree	Medium degree	Low degree	Evidence: behavioral markers
Peer-Peer collaboration	X			 Total: 22 S work together in groups (mixed gender) Evidence of ongoing discussion between S during group activities S share learning guides/resources and are seen pointing to material and talking to each other
Turn-taking	X			 S raise hands often to participate (M 25, F 42.5)* Some instances of S interjection (M 8.3, F 15)* S do not speak over each other when contributing *M vs. F divide by M/F in class x 10
Student leadership opportunities	X			 Total: 6 M writes date on board and leads prayer S lead song M & F distribute learning guides to classmates F lead dynamic activity, other students take lead Reference to student committees and bathroom monitor

Classroom environment	High degree of implementation	Medium degree of IMP	Low degree of IMP	No IMP	Instruments/Examples
Use of and access to ENA instruments (M/F)	X				Presence/use of ENA instruments: Use of autoasistencia Correo de amistad (Y/N) Suggestion box (Y/Y) Traveling diary (Y/Y) Student government committees (Y/Y) Presence of and reference to "Pacto de Aula/Convivencia" (Y/Y) Students share and use ENA learning guides S assigned roles M vs. F access to and use of resources – resource corner, classroom library, art supplies, technology
Classroom organization	X				 Desks face center of classroom Desks are set-up for collaboration M and F are distributed evenly throughout class Space is utilized for groupwork or other group activities

Classroom Map



Observation notes

Observations:

Beginning - 0:00

(0:00) Student (M) leading prayer to begin class – standing next to T

Wearing uniforms – girls in longer skirts, boys in pants

- (1:30) Starts with full-class song led by same S who led prayer
- (3:07) Students take attendance not a very organized line
- (3:44) M student writes date on board reports to class
- (4:17) First activity whole-class, forms circle mix of F and M together (girl and boy holding teachers hand)

M was standing by teacher but then goes and puts himself in between 2 F

Taking turns – call on each other to perform next saying (M, M, M)

- (6:29) T asks for raising hands 1 M 1 F raise hands teacher calls on F
- (6:57) Activity starts over Teacher calls on F, F, F, M
- (7:06) M is shy "estás tímido hoy"

T tends to call on F first after she starts activity

(7:45) T says – remember the "pacto de convivencia" remember to raise your hand (students talking out of turn)

Lets M student direct (after he raised his hand) – asks other students to raise their hand to answer his question "who wants to participate?

T makes eye contact with all students in circle

(8:45) "están muy tímidos hoy"

- (10:00) Leads into group activities T goes over to M in Table 4 and asks if he's done his homework S distribute workbooks both M and F are handing out materials
- (10:50) Table 2 (4M 2F) start working together in workbook distributing roles
- (11:06) M at table 4 is distracted (nothing to do, teacher took homework) and sitting alone
- (11:26) T comes over to explain what he is going to do today (since his classmate is missing)

Table 1 (2F 1 M) is working together (F helping M)

- (12:03) T goes over to Table 1 and explains what they are going to do today tells them to have a conversation
- (12:39) Table 1 taking turns discussing
- (12:40) T goes to table 4 to work with M who is alone sits down next to him

S at Table 1 and 2 are working very quietly together in their groups

It is very hard to hear S group conversations since the mic/camera is focused on T

(13:28) T gives positive feedback to M at Table 4 (muy bien etc)

M is sharing pencils with his classmates – hands them out from his own pencil pouch (1 to M 1 to F)

All S (except for table 4 M) are working from guias de aprendizaje – some are sharing copies

- (15:10) T goes to table 1 to work with them, asks comprehension questions -2 F participate before boy (who raises his hand)
- (15:43) Camera zooms to table 2 who is working quietly sharing 3 guides between 6 students (boys and girls sharing)
- (16:46) T calls on Carolina (F) on table 1 to read from guide to peers

Table 1 learning about indigenous myths – learning about local/cultural traditions and roots

(18:20) – teacher asks "what did your parents teach you about who/what created the earth, sun, moon etc" and students respond "dios" and T asks "un dios o dioses?" – religious element in teaching "todos somos Catolicos" pero los indigenas no creen en nuestra dios

(19:06) Each S has their own box on the back table – F have pink/purple while boys M blue/green – did students pick the colors themselves (follows traditional gendered colors closely)

Table 2 working together to explain next activity in guia – both F and M are taking turns explaining Working together constantly

(19:27) Table 1 – T calls on other F student to start reading – she struggles but teacher does not interrupt to correct her immediately

(20:54) T asks S about what legends they have heard – M raises hand and talks about "madre agua"

(22:10) Activity in guide – look on the internet for other myths and legends – S apply what they learn and expand on lesson

Stop observing at 22:15

Middle (1:29:30)

(1:29:26) T is working with table 1 (who now have tablets)

Activity asks students to work in groups

Calls on F to answer question – reminds students to raise their hands to participate

(1:30:20) There is a "bathroom monitor" that is in charge of letting students leave class (M)

T leads discussion questions with group 1 – one student will answer and she'll look at another student to explain the answer/her response – more like a conversation with the group, not just 1 on 1 with student

(1:31:40) Gives Table 1 assignment to write out a legend and then they will do the application activity Trabajo con la familia (work with the family)

(1:32:15) T goes to work with Table 2 – sits down with them

Reminds students to raise hand to participate

(1:32:40) M & F raise hands – calls on M then F, next question M raises hand

(1:32:56) Gets up to help Table 4 M and asks F student to lead next question – she starts

discussion – gets a little rowdy when T leaves – less organized conversation

(1:34:29) Teacher comes back to Table 2 to help – gives students directions for next activity (write sentences in notebook)

(1:36:02) T goes to Table 1 for application activity

(1:36:21) Cuaderno Viajero – asks students to ask relatives about a myth/legend from their culture and write it in the cuaderno viajero (F takes cuaderno home)

(1:37:04) F takes cuandero home because it's her turn

(1:37:23) T goes back to Table 2 – this time sits between M (before she sat between F)

Learning guides form basis of lessons for all tables/grades

(1:38:34) Camera zooms out to all S – all tables are working quietly together while T is at desk

(1:40:00) Table 1 working independently while table 2 still working as a group

(1:40:30) Teacher calls student "señora" to address her question

(1:40:49) F from table 1 finishes activity, T asks for her to check it – brings it to T desk

M and F from table 1 work together

(1:41:15) T tells F to get a myth/legend from the library and read it

(1:41:30) M from table 4 uses something from learning corner

(1:42:00) F from table 2 calls T over when they're done with assignment

Teacher explains exercise again and makes eye contact with 3/6 students

(1:43:30) Positive feedback - "muy bien Angie....señor"

(1:44:08) Teacher corrects students' work – has to explain assignment again to M student (doesn't show frustration)

Calls on F who is crying asks "why are you crying?" – "por que lloras? No hay problema que hayas equivocada" – moves on to other (1:46:51) T says they're going to help Jenny write 2 sentences – teamwork – "it's ok that you messed up"

(1:48:10) Table 1 – F is leading reading activity while others follow along

(1:48:26) – F at table 2 is still crying – "vamos a esperar hasta que la niña termine, vamos a acompañarla, no vamos a dejarla solita" – makes sure S are all on same page without leaving one behind

Moves on to next page – asks crying F to select example – includes student who feels unconfident

(1:49:30) Table 2 moves on to application activity – sharing with family

(1:49:38) Exercise 1 – write a paragraph about how I can improve my behavior in school and turn it into the suggestion box

Exercise 2 (1:51:20) – write 4 paragraphs explain the importance of playing in school and present it to the sports committee (members in class) – comite de deportes is 3M and 1F **Stop observing at 1:52:33**

End - 2:39:27 - 3:01:22

(2:39:50) T is sitting with Table 1 – working on science – F reading to group

T explains physics/movement/force

Table 3 M (moved from table 2?) comes over to table 1 – is working on same type of lesson so T incorporates him into table 1 discussion

(2:41:14) Table 2 is working independently

(2:44:00) M and F at table 2 are working a problem out in book together

(2:44:50) T walks over to M at Table 3 – he is working on computer

T brings over worksheet with wild animals on it – goes through animal names with him (2:45:50) 2M from table 2 walk over to T at table 3 – ask about next activity

2M go to learning corner for tablets – F gets her own

Table 1 also works with tablets – Table 2 gets them tablets

S are getting very distracted at the end of the day – mixing tables and all over the salon

(2:48:20) T walks to table 2 who all have tablets to explain activity

(2:48:53) S at table 2 have a hands-on activity for science – using tablets and some kind of toolkit

(2:49:10) T is working independently with M from table 2 on different science lesson (at table 4 – splits from table 3)

Sits next to him at table

T asks M comprehension questions about the activity he just finished – has an a ha moment about pendulum

(2:52:30) T back to Table 2 – always sits in same spot between 2F

(2:54:46) T asking comprehension questions during video – F answers

(2:55:21) during exercise with Table 2 about hydroelectric power, T is mainly looking at M students for answers

Next activity - Tells S to watch another video so they can explain to her how hydroelectric power works

2F split off and share a tablet to watch video and 3M watch 2 tablets

(2:57:13) T goes over to 2M at tables 3 and 4 to check on them – sits down with M at table 3

(3:00:00) Peer-peer help @ table 1 during homework/independent learning time

(3:00:33) T sits with M at table 4 to work on activity with him

Strengths observed:

Although the ratio to M/F was off (6/4), F seemed to participate equally in exercises, in both wholeclass and group activities although they took a little longer time to warm-up in the beginning of class

F both raised their hands and contributed without raising hand in group-work when T asked comprehension questions to group

S worked majority in groups throughout class – did not approach teacher for help or call her over (only a few instances) – did not ask her for simple answers or to "approve" work

F led conversations and reading to tables – both when asked by T and voluntarily

T constantly telling students to "raise hand" and take turns – part of "Convivencia" – instilling student behavior and respect of others

Applicable use of ENA instruments (suggestion box, traveling journal, attendance tracker) – M & F have equal access to resources, tech, books etc

T splits time between 3 groups almost equally – stays for majority of lesson to explain thoroughly and go through lesson – returns to ask comprehension questions

Guias de aprendizaje – direct lessons and connect to out-of-class life – incorporation of ENA elements

Classroom is very calm (except towards the end) – students work independently and quietly – not screaming over each other

When S do activity wrong or do not understand, T explains again in calm voice, not showing frustration or anger

T encourages group-work but also participates in the groups

Suggestions for improvement:

Mix M and F more at table 2 (M all sitting together, F sitting together)

T gives more positive feedback "muy bien" to M

Overall Gender Equality Analysis:

Strong evidence of gender equality (more female participation) + high degree of ENA implementation

Teacher incorporated almost all ENA instruments present in the classroom – auto-control de asistencia, traveling journal, suggestion box, student roles, and classroom rules. Friendship mailbox was present but was not incorporated into the lesson. Teacher incorporated various teaching aids and strategies into the activities (technology, games) with heavy use of ENA learning guides during group-work. ENA learning guides were distributed evenly among students, where most students shared guides in pairs, facilitating interaction and collaboration among peers. All students had their own supplies box on back table that they had access to throughout the class period and both M and F students accessed the resource corner and student library. Most classroom time was spent in group activities, where students worked autonomously and collaboratively out of learning guides or using other aides such as tablets or laptops (2nd highest rate of collaboration). Very few incidences of students approaching teacher for guidance or answers – students relied on peers for help or guidance during activities (low reliance on teacher as director of class). Teacher controls student behavior and asks students 5 times to raise their hands in whole-class and group activities, referring to the classroom rules of Convivencia. Teacher encourages collaboration and group work so that students work together on activities and are not reliant on her to check work or answer questions. When visiting groups, Teacher sits down with students (horizontal learning), explaining activity to students and reviewing exercise to check understanding. T calls on M and F students to read aloud and contribute ideas, significantly calling on F more often than males. T uses student names equally when calling on students to participate. T uses ENA guides to direct activity and asks followup questions for comprehension and real-life application. Teacher engages with students with more than Y or N questions and encourages S to think critically about the activity and their knowledge of the subject. T is attentive to student needs and different paces of learning (asks peers to work with F student who is falling behind in activity – assures F that nothing is wrong and that they will work together as a team). T also pays significant attention to M who is sitting alone, spending more time with him to complete assignment, noting that he does not have peers to work with. Classroom is large and spacious – uses front of room for beginning of class prayer and games. Desks are oriented to facilitate discussion between students and students have room to walk around to other groups if needed. Most of class is spent in groups, but Teacher begins class with whole-class didactic activity where students take the lead and volunteer to participate. Evidence of student leadership (M writes date, M leads prayer and song, F leads game) and student committees are referenced.