

The Leadership Edge: How Teachers Taught, Learned and Led During the *Escola Plural* Reform in Belo Horizonte, Brazil

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Abstract

This paper is about the dynamics between systemic educational reform and teachers' efforts to improve classroom practices. It examines teachers' work in the context of school change by focusing on teachers as the main catalysts for learning and transfer of best practices. More specifically, this research seeks to understand how teachers interpret, adapt, and transform practice to make it relevant both to teaching and to the learning realities of classrooms. Relying on case study methodologies this research provides an interpretation of policy implementation differentials among school teachers who try to improve the quality of municipal schools in Belo Horizonte, Brazil, the third largest city in the country. Using elementary school teachers as the unit of analysis, this study reveals that successful implementation may be attributed to (1) teachers' commitment to the task at hand, (2) a strong desire to take charge of their learning, and (3) a self-imposed ethos of collaboration and participation. By taking a close look at the creative ways teachers reach out to their learning communities in search of solutions for classroom challenges, this field work expands the notion of teacher agency in educational reform in two significant ways: first, it recasts the agency of school teachers in a wider network of practice that is embedded in the practitioner's desire to change curriculum and pedagogy. By doing this, it re-conceptualizes human agency by pushing its boundaries beyond the confines of local politics. Second, it defines the plasticity and the limits that agency imposes on the ability and the skills of teachers to undertake the challenge of school reform by transforming themselves and improving teaching and learning.

The Context

Brazil has experienced unparalleled socio-economic transformations in the post-military era. The country not only has succeeded in giving shape to a fledgling democracy; it has improved the quality of life for millions of Brazilians by affording them increased mobility and a better share of the consumer market (Rohter, 2010; IBGE, 2008; 2010). In thirty years, the Brazilian population has jumped from 119 million in 1980 to about 191 million in 2010, an increase of almost 38% (IBGE,¹ 2010; Omestad, 2008). Following the footprints of previous demographic trends, population flow and dislocation from rural to urban areas has continued, and 160.9 million (84.3%) Brazilians now (2011) live in cities. This massive urbanization has caused the intensification of services and activities linked to communication and education. The digital boom worldwide in the past few decades has also had a rippling effect on Brazilian society. According to a recent census by IBGE, the number of Brazilian households with access to computers more than tripled in ten years. It is estimated that currently close to about twenty two million families own a computer at home; another 50 million have access to the internet, and over one hundred and twenty-million own cellular phones (IBGE, 2008; 2010). While these are arguably hallmark improvements for a country that is 'finally finding its economic groove' in the international scene, the same shifting circumstances place tremendous pressure on Brazil's educational system (Omestad, 2008). This is particularly taxing, as scores of Brazilians believe that education is the universal cure for most of Brazil's problems. Furthermore, many people think that only a new crop of quality teachers will help foster the adequate knowledge and skills which are required in a world increasingly multicultural and inter-dependent.

The pressure on education

Even in face of increased attention and investment in the development of human and material capacity in past decades, structural problems continue to plague Brazil's educational system.

¹ Brazilian Institute of Geography and Statistics.

While illiteracy has fallen steadily over the last quarter of a century, Brazil's literacy continues to lag behind most Latin American countries, and even has scored below some of the region's less economically prosperous nations such as Bolivia and Peru. With 14.1 million illiterates fifteen years and older in 2008 Brazil ranked fifteenth in a group of twenty-two regional countries, Haiti being the last with illiteracy at 37.9% (IBGE, 2008)². According to this same source, access to an education of quality remains the privilege of the upper-middle class, and the wealthy. Not surprisingly, the higher the income of working class Brazilians, the greater the likelihood that those 15 years of age or older will know how to read and write according to national standards. In metropolitan São Paulo alone, the largest and most industrialized city in the country, by year 2000 13.3% of those making one minimum wage or less were functionally illiterate³. In the city of Belo Horizonte, where this study was conducted, 15.6% of this same income group were unable to read or write. As the focus of interest shifts to regions or to the rural areas across Brazil, illiteracy rates increase substantially. Northeastern capitals such as Natal, Fortaleza or Teresina, still had illiteracy rates over 20% according to IBGE's 2000 demographic census. In economically underdeveloped rural areas such as in the Northern or Northeastern regions illiteracy can reach more than 50% (IBGE, 2000)⁴. As the Brazilian middle class has widened its ranks by adding an extra 20 million people in the last two decades the pressure on education continues to rise (Omestad, 2008; Rohter, 2010).

Despite considerable improvements in the structure and organization of elementary education sparked by the 1996 Elementary Education Act, over one quarter (8.3 million) of all primary school children repeated the same class in 2007 (UNESCO, 2008; Ministério da Educação, 2008). Of all students tested at completion of fourth grade in the year 2000, 59% could not read at grade level. Part of this "failure" may be related to the poverty of teachers themselves. According to IBGE, in the year 2000 these school teachers were making a monthly salary of about US\$400.00, and many of them were head of households. Similarly, UNESCO's A view inside primary schools: A world education indicators (WEI) cross-national study (2008) reports that 28.6% of these underpaid teachers worked in more than one school as compared to other Latin American countries: Chile (10.1%), Paraguay (8.0%) or Peru (2.7%). Worth noting is the fact that while overall enrollment in K-12 (Educação Básica) increased 20.3% (11,357,397) during the decade 1996-2006, more recently some municipalities, including the city of São Paulo, have struggled to make enough classrooms available for incoming school age children⁵. However, in such a context of educational deficits, the stakes have become high as the municipalities are being made increasingly accountable for their educational inadequacies⁶. As Brazil edges into a new role in the world economy (Omestad, 2008), it has become imperative for the Brazilian society to break away from an undemocratic legacy of authoritarian rule that has left millions of Brazilians on the fringes of society, many of them barred from their right to an education.

Continuity and change

Just as Brazilian society is changing so rapidly, so are the conditions of schooling and the realities of learning. It is a kind of "reality shifting" that cuts deep into real transformations in the lives of people as they try to rid themselves of the educational inequalities inherited from the past and make meaning of the world changing around them. As Giddens (2000) puts it, the reality we live today transcends student access to schools and technology (i.e. videos, television sets, personal computers, cell phones and so forth). He states: "We live in a world of transformations, affecting almost every aspect of what we do." "For better or for worse," he continues, "...we are being propelled into a global order that no one fully understands, but which is making its effects felt upon all of us" (pp. 24-25). In Runaway world, Giddens (2000) appropriately defines this contemporary transformational process, as the one illustrated by the shifting patterns of the Brazilian institutions, in terms of an inevitable tension between "fundamentalism" and "cosmopolitanism."

² According to IBGE's household census released in 2011, Brazil's illiteracy rate dropped from 10.5% in 2008 to 9.6% in 2010 (IBGE, 2011).

³ IBGE considers "functional illiterate" anyone short of a 4th year of elementary education.

⁴ Instituto Brasileiro de Geografia e Estatística (*Brazilian Institute of Geography and Statistics*); (IBGE, 2000); Censo Demográfico;

⁵ Modenese, F. (2008). Ano letivo de 2008 começa com 6 salas de lata em São Paulo ("2008 school year begins with six tin classrooms in São Paulo." São Paulo, Brazil: Folha de São Paulo (www.folha.uol.com.br); February 2, 2008.

⁶ The 1988 Brazilian Constitution has universalized basic education and made primary schooling mandatory for all children 7 through 14 years old (LDB 9.394). Because basic education is responsibility of both Municipal and State Governments, educators and policy-makers are accountable for meeting the standards and procedures set by Brazil' Ministry of Education.

"Fundamentalism," in this context, refers to the socio-political pull to keep reality unchanged or the refusal to adapt it to "...a globalising world that asks for reasons" (p. 67). "Cosmopolitanism," argues Giddens, "...is a shift in our very life circumstances as society makes sense of the cultural diversity of the present." "It is the way we now live" (p. 37). Lieberman and Miller (2004) also acknowledge the existence of similar conflicts in the context of the reality of American Schools as demographics shift and new social patterns evolve in this country. In *Teacher leadership*, Lieberman and Miller (2004) state that the tension between stability and change, fundamentalism and cosmopolitanism "... reflects the disequilibrium that once-stable communities and nations experience when they are confronted with rapid and far-reaching economic and social change."

While Brazil is certainly going through a 'quiet revolution' that is transforming the lives of millions of people (i.e., expanding access to technology and reducing illiteracy) changing the culture, structures, and the organization of schools requires *cosmopolitan* answers on the part of local governments, teachers, and school administrators.

Even when expenditure in education, as a percent of Brazil's Gross National Product (GNP), has been kept at about 4.0%,⁷ municipal and state authorities have aggressively and creatively devised comprehensive new policies aimed at improving the quality of schooling and making it accessible for more school age children. Some of these have come and gone (O'Cadiz, Wong and Torres, 1998), and others continue to influence policies and classroom practices (de Miranda, 2008; Anderson, 2002). Yet others -- like the Escola Plural Project (the object of this study) -- are beginning to take shape in the wake of a new impetus to consolidate democracy and respond to the emergent needs of a fast-changing society.

One of the most researched and internationally recognized of these undertakings were the democratic reforms in the city of São Paulo while educator Paulo Freire was Municipal Secretary of Education, 1989-92 (O'Cadiz, Wong and Torres, 1998; Stromquist, 1997). Another was Rio de Janeiro's Integrated Centers of Public Education (CIEPS--Centros Integrados de Educação Pública), described by Leonardos (1993) and Wong (1994). Other comprehensive attempts in revamping elementary education in Brazil, however less internationally known, include Brasília's "Educação Candanga" and Porto Alegre's "Escola Cidadã" (da Silva, 1998; de Azevedo, 2000). More recently, Belo Horizonte's *Escola Plural Project* has become one of the most revolutionary municipal educational reforms in Brazil in the last 25-30 years. This case study revisits Escola Plural's story to underscore the lessons learned and the policy mistakes to be avoided. It shares the same intellectual curiosity, interest, and the practical reasoning which moved teachers, school administrators and policy-makers in Belo Horizonte's Municipal School District for over a decade. In order to understand how such a complex policy interfaces with the practices of teachers in their classrooms over a period of three years, I spent two summers and a spring in three elementary school sites in Belo Horizonte (which I call Serrinha, Ilha do Sol and Meia Ponte). The conclusions I have made rely on teachers' interviews, archival data, and classroom observations parsimoniously collected between 1996 and 2009. In the case of classroom observations, I spent over one hundred and thirty hours observing, and "logging data" from fifteen classrooms. In the next two sections, I will begin to tell the *story* of Escola Plural.

Escola Plural: Project Background

The Escola Plural Project⁸ is an attempt by municipal policy-makers and educators to radically transform elementary schools by confronting a chronic state of grade repetition and student dropout in Belo Horizonte⁹. In 1996, the year Escola Plural was started, 184,921 students were enrolled in 170 elementary public schools, of which 25% were believed to be single- or multiple-year repeaters (Secretaria Municipal de Educação, 1994).

⁷ Economic and/or political circumstances can force this index to either go up or down. For example, in 2007 the Brazilian Government spent 4.6% of its GNP to cover costs with education (INEP, 2008). The Government's goal is to stabilize this at the level of developed nations worldwide (approximately 5.0%).

⁸ Throughout this paper, I may refer to this educational reform either as the Escola Plural Project or simply Escola Plural (EP). Although most of the time I use these terms "interchangeably, I choose the qualifier "program" when it connotes advanced stages of project implementation.

⁹ Belo Horizonte is state capital of Minas Gerais, in Southeast Brazil, and the third largest metropolitan area in the country, with a population of 2.4 million, according to 2007 IBGE's counting (IBGE, 2007).

According to local authorities, in the years previous to this new reform, the dropout rate was 10.0% or higher in most schools, and it wasn't uncommon for half of the student age population to not be enrolled because of the lack of space availability. Not finding a spot in a municipal public school has been attributed to disproportionately high demands for schools despite continuous effort by local authorities to add new facilities. A case in point is the city of Belo Horizonte, where the Municipal Secretariat of Education had to build 44 new schools in less than a decade before the implementation of *Escola Plural* as the number of students jumped from 122,004 in 1989 to 184,921 in 1996 (Secretaria Municipal de Educação, 1996).¹⁰

Thus, *Escola Plural* is an educational project conceptualized by a group of policy-makers and educators determined to confront this educational reality. As Anderson puts it, "The overreaching objective of the program was to radically change the way teaching and learning is done by adapting teaching to children's individual differences and creating spaces for participatory learning" (2002, p. 14). In order to accomplish these ambitious educational goals, Belo Horizonte's Municipal School District has adopted "policy devices" which include: (a) restructuring teachers' work by expanding professional development opportunities; (b) adding more teachers per classroom; (c) breaking teacher isolation by implementing team-teaching; (d) introducing qualitative evaluation; (e) redesigning student placement; and (f) redirecting curriculum and pedagogy to be more responsive to students' needs. This *reculturing* of Belo Horizonte's municipal schools can be summed up by a key member of *Escola Plural*'s design team: "... We wanted a school that was open to the community, and while a happy and pleasant place for learning and teaching, it could also contribute to the demands of new public policies. We thought of a curriculum that was diversified and culturally sensitive to the increasing number of traditionally disenfranchised children now looking forward to a public education that is inclusive, democratic and dynamic" (Personal communication, 1998).

While these are worthy (and desirable) educational goals, their validity, however, is contingent on how they play out in schools and classrooms. However, before we examine more closely how *Escola Plural* interfaces with teachers and classrooms, let's overview its objectives more closely.

Overview of the *Escola Plural* Project

The *Escola Plural* Project is a program that emerged from the creative but fragmented experiences in curriculum and pedagogy scattered throughout Belo Horizonte's Municipal School District (SME-BH).¹¹ In the language of the policy documents that institutionalized this reform, the School District officially recognizes the *emergent* best educational practices within the Municipal School System and makes them the hub of a comprehensive educational overhaul (Secretaria Municipal de Educação, 1994). While bringing proven educational practices to the core of its official policy, the District vowed to guarantee school autonomy and the continuity of work by teachers and principals.

The *Escola Plural* Project revolves around four major nuclei. The first nucleus (*Eixos Norteadores*) establishes the *Escola Plural* Project's theoretical foundation and defines the leading principles behind this reform. According to de Miranda (2007), these principles represented the backbone that "guided all other actions taken within *Escola Plural*" (p.64). The policy document that launched the *Escola Plural* Project (Secretaria Municipal de Educação, 1994) introduces eight themes to orient the activities of 178 municipal schools and a teaching staff of over 8,000. These include, for example, the collective and inter-dependent nature of school work; sensitivity to children's learning and their socialization process as a whole; linking curriculum to students' socio-cultural experiences; and the development of new professional and institutional identities. These principles stem from a belief that a democratic education of quality can do away with "...alienating school structures and the culture that reproduces them" (Secretaria Municipal de Educação, 1994: p. 4). For de Miranda (2007), the task of re-culturing schools involves many things, including (a) improving de quality of learning in the Municipal School System; (b) reducing drop-out rates by taking poor children off the streets; (c) eliminating grade repetition; (d) turning the school into a cultural center for the community; (e) making schools into a pleasant place so that children can enjoy attending them. (p.64)

¹⁰ The fast expansion of student enrollment in Brazil in the 1990s is generally explained in terms of population growth but also as a byproduct of Constitutional requirements that elementary education be universalized to all school age children (Brazil, 1988).

¹¹ Although I sometimes refer to *Escola Plural* either as *Project* or *Program*, more recently some researchers have preferred the latter when they speak about post-implementation stages (de Almeida, 2005).

Conceptualized this way, children's education is seen as a right (to learn), and schools, as democratic institutions, should be open to everyone, to their cultural contributions, and should make an effort to keep kids learning as much and as long as they can (Castro, 2005). But in order to enrich this experience and to guarantee that children stay focused on learning, the proponents of Escola Plural needed to diversify the curriculum, making schools interesting places to be, and to change the forms of interactions between and among teachers and students. This brings us to the second nucleus of the Escola Plural Project: School reorganization of time and space. By school reorganization of time and space, it is meant a change from the traditional linear system (*seriação*) that selects and promotes students towards higher grades. In the traditional system, explains the proponents of Escola Plural, if a student failed a grade, he/she was forced to repeat that grade over and over until s/he obtained a minimum of 60% mastery of the content of that discipline. It was not uncommon for students to fail one single discipline and still be forced to repeat a full year even if s/he earned sufficient points to pass the other ones. One way that the proponents of Escola Plural found to begin untangling this problem was (a) to abolish the "seriação;" (b) expand elementary school from eight to nine years; and (c) assign students to classrooms based on their ages (see Table 1). By way of re-organizing students into groups based on their developmental stages rather than on "rigid" linear structures, as in the "seriação," these educators hoped to accomplish at least two things: avoid learning discontinuity, and support stronger socialization among students.

The consensus among these educators was that by keeping children close together based on their ages it would make more sense for the development of age-appropriate subject-matter, and it might even generate better student performance (Secretaria Municipal de Educação, 1994; Anderson, 2002). According to de Miranda (2007), working within the flexibility created by the *ciclos de formação*, "... the students benefit from extended time to learn together, at the same time that their teachers expand the opportunities to work more collectively in the solution of problems" (p.65). An obvious consequence of this new constructivist perspective that grounds learning to the natural developmental stages of each child is that teachers need to retool pedagogy and curriculum to fit this new logic.

Aiming at answering structural challenges by replacing old organizational styles with new practices, Belo Horizonte's Municipal Secretariat of Education proposed collective structures such as assigning three teachers for each set of three classrooms. "At Escola Plural..." reads the master policy document from SMED-BH, "... the planning of lessons and classroom activities with the students must be discussed and thought out within the parameters of each cycle of learning, always counting on a collective of teachers working together with groups of students" (Secretaria Municipal de Educação, 1994, p. 16). Relying on such a structural design, the SMED-BH assumed the collective problem-solving principle it had been stating all along by breaking the isolation that separates teachers, and releasing the burden placed on the individual (Secretaria Municipal de Educação, 1994). By having an added number of teachers for each group of students it was also hoped that teachers could not only support each other in solving issues related to students, but it could open a cascade of opportunities for study, reflection and professional development. While the *ciclos de formação* seemed pivotal to placing all the pieces of this reform together, there were still two other major policy facets that needed to be addressed: how to select, organize, and deliver the new curriculum (nucleus 3), and how to assess student learning (nucleus 4).

Table 1. Escola Plural's Elementary School Grade Structure

"Ciclos de Formação" (Learning Cycles)	Developmental Ages	Corresponding Grades in the Traditional System
"Infância" (Childhood)	6, 7, and 8	K through 2 nd
"Pré-adolescência" (Pre-adolescence)	9, 10 and 11	Third through fifth
"Adolescência" (Adolescence)	12,13 and 14	Sixth through eighth

Source: Municipal Secretariat of Education, Belo Horizonte (SMED/BH).

The third nucleus of the Escola Plural Project addresses what has been defined by its designers as “plural education processes” (processos de formação plural). This new outlook on student learning demanded a re-conceptualization of curriculum making, restructuring of the disciplines, and the implementation of student-centered pedagogies. This reform proposed an inversion of the prevailing logic in traditional school settings; that is, turning “*seriação*” on its head by focusing the attention on dynamic socialization, and students’ age-appropriate needs (i.e., emotional, intellectual, kinesthetic). This rather fluid perception of student needs should include the social context outside classrooms and be the driving force in generating a sustainable curriculum (Secretaria Municipal de Educação, 1994; Dalben, 2000; de Miranda, 2007).

In line with such definition of curriculum-making, the content and standards of education should be informed by the knowledge and the methodologies from the various disciplines, and by the realities of the student clientele. The Escola Plural Project’s pedagogy to achieve the above goals rejects the *transmission* approach, which relies heavily on summative knowledge, memory recall, and testing. According to de Miranda (2007), this pedagogy challenges the stand and deliver teaching/learning format. She states that prioritizing “... copying and memorization of pre-established ‘true’ knowledge that must be internalized by students” is detrimental to discovery and wondering (p. 65). Instead, the pedagogy of the Escola Plural Project supports participation, experimentation, risk-taking, and choice, involving all stake holders in a process of sensitivity that re-signifies the child as whole (de Miranda, 2007; Castro, 2005; Dalben, 2000). However, how does one know when students are learning what teachers are supposed to teach in schools that adopted the Escola Plural Project? What principles were used to guide student evaluation district wide? A discussion of Escola Plural Project’s fourth nucleus (evaluation) follows.

At least three features make student evaluation at Escola Plural distinct from previous evaluation cultures throughout Belo Horizonte's school system: (a) the focus shifts from a passing grade based on the number of points accumulated by each student to the process of authentic student learning; (b) it is a joint effort that involves the cycle's teaching team (trio), the student, and the student's family; and (c) the purpose of evaluating students is to identify problem areas, and to design and implement concrete interventions. Dalben (1998), in School assessment: A process of reflection on teachers’ practice and in-service education,¹² makes this point even more forcefully.

¹² Free translation of Avaliação escolar: Um processo de reflexão da prática docente e da formação do professor no trabalho (1998). Doctoral dissertation. Brazil: Federal University of Minas Gerais (UFMG).

She states that the new conception of evaluation proposed by Escola Plural applies not only to student assessment *per se* but to the whole educational apparatus (teachers, students, school cultures) responsible for student learning (or the lack of it). Dalben (1998) refers to this as an *interactive process* that makes everyone accountable for educational outcomes: "everyone evaluates everything while being evaluated by everyone" (p.64). By pushing evaluation to collective accountability, Escola Plural refused to blame student failure on either the students (and their families), or on the teachers. In place of somber numbers or de-contextualized evaluation concepts embodied in letter-grading, the collective of teachers was required to provide qualitative descriptions of student progress. This qualitative, continuous *process-evaluation* methodology was supposed to take care of the transitions between and within cycles, and the assessment of students exiting lower and upper-elementary education¹³. Within schools, for example, student evaluation took shape through three separate moments: first, an *initial evaluation* was carried out as an organizational mechanism responsible for grouping students according to their ages, and their needs. This inventory had a preliminary general diagnostics purpose aimed at providing subsidies for actions by the teaching staff.

The second moment (*continuous evaluation*) involved ongoing evaluation by the teachers responsible for a particular learning cycle. Based on these assessments, the teaching staff could plan concrete interventions, re-evaluate content sequence, or reflect on the general scope of the disciplines. Another component of evaluation (*final evaluation*) was focused on "cumulative" processes related to the end of the academic year, or the conclusion of a learning cycle (end of a third year). Or, it could include evaluating a student's performance as s/he was preparing to move on to another school, or graduating.

From principle to practice

Translating the elements of the four nuclei of the Escola Plural Project discussed above into a complex network of elementary schools implied the deployment of extra resources, and specific benchmarks. Some of these included a timetable for implementation, strengthening of schools' organization and infrastructure, and massive investment in human resources. For example, in order to fulfill the goal of three teachers for each group of two classrooms, the Municipal Secretariat of Education needed to hire five hundred new teachers, and train them into Escola Plural Project's new approach to curriculum and pedagogy (de Miranda, 2007). Valadares and Villani (2006) adds that investments in material and human resources necessary for supporting the "Escola Plural Project" during the years 1993-1996, included, among other things:

- (a) creation of discussion/reflection time (meeting time) at the schools;
- (b) teacher work reorganization (ratio of three teachers per two classrooms);
- (c) publication of six policy guidelines (Cadernos da Escola Plural);
- (d) staff and professional development;
- (e) one hundred and sixty seven workshops and seminars;
- (f) construction of new municipal schools;
- (g) administrative staff's and teachers' salary increase;
- (h) first Municipal Conference on Education (p.2).

The Escola Plural Project was meant to be implemented in two years. During the first year (1995) the Secretariat of Education targeted grades K-5, the second (1996) grades sixth through eight. The educational community in Belo Horizonte seemed aware of the herculean task ahead of them but was also eager to try something new. In the words of Glauro Vasques de Miranda, Municipal Secretary of Education at the inception of the Escola Plural Project, "the major objective [of this reform] is to construct a non-discriminatory, multicultural, democratic school, inclusive of all individuals independent of racial, sexual and ethnic background" (Miranda, 2007; p. 61). For the proponents of Escola Plural, changing a vision of education from a model centered around a *present-past* model to a mood of hope designed to invent the future had to begin by answering three basic questions: (1) Why so many elementary school children are either held back in schools, or end up dropping-out? (2) Do we have the competence required to reverse this trend? (3) Are we willing to reshape old educational structures to set in place a new logic that is sustainable culturally and guarantees everyone's right to an education of quality?

¹³ Belo Horizonte's Municipal School Network (RME-BH) provides various levels of schooling: early childhood (*educação infantil*), elementary education (*ensino fundamental*), high school (*ensino médio*), special education (*educação especial*), and youth & adult education (*educação de jovens e adultos*).

The answer to these questions had been brewing since the late seventies among educators, teachers, and policy makers throughout the Municipal School System.

This new conception of schooling aimed at revitalizing the process of learning by connecting the lively experiences of pupils and teachers with the formal aspects of schooling, an assertion that relies on at least three interlocking principles: 1) that Escola Plural has installed a new school culture that is collective/participatory in its orientation, and socially relevant to its local constituents; 2) that classroom content is a permanent conduit of culturally meaningful information from and to the society; and 3) that the main goal of school is to learn the most effective way to increase access to knowledge to large numbers of school age children who are pushed aside by attrition or simply by failing to advance to the next grade level. It is this far-reaching philosophy that distinguishes Escola Plural Project from many similar school reforms in Brazil as well as in the United States.

Unsurprisingly, the implementation of the Escola Plural Project is met with varied levels of enthusiasm, skepticism, and even resistance among teachers, parents and students. Nonetheless, the longevity of this educational project may be interpreted as a form of legitimacy anchored in community support. To a great extent, the initial optimism of a great number of teachers, principals and parents who believed in the Escola Plural Project felt validated. These *visionaries* may have been the real supporters of a *present-future* education in the Municipality of Belo Horizonte, and whose commitment to equity and universal access to schooling has set them apart from the rest of the pack. Next, I will examine what I consider the most significant factor in getting the Escola Plural Project from the drawing board to the day-to-day realities of classrooms: the *agency* of teachers.

Escola Plural's Policy Implementation and Teacher Agency

For the purpose of this study, I have defined *teacher agency* as teachers' capacity, desire and a sense of collective commitment to transform instructional practices and work relationships in schools. By widening the definition of *teacher agency* to include other variants of leadership, I wanted to be able to acknowledge teachers' *new* ways of learning, leading and working together to transform the "*culture of schools*:"

A complex pattern of norms, attitudes, beliefs, behaviors, values, ceremonies, traditions, and myths that are deeply ingrained in the very core of the organization. It is the historically transmitted pattern of meaning that wields astonishing power in shaping what people think and how they act.... and all school cultures are incredibly resistant to change, which makes school improvement from within or from without-usually so futile (Barth, 2002).

Seeing Escola Plural as a counter-culture to "historically transmitted patterns of school behavior" has allowed me to look more closely at the concrete actions of teachers and principals trying to reshape curriculum and pedagogy: the 'leadership edge'. In the remainder of this section I offer an interpretation for the positive outcome of this counter-culture within classrooms. This interpretation builds on the characteristics of *pluralist teachers*¹⁴ as they represented the most successful group in implementing the goals of Escola Plural. I argue that without individual and collective efforts of *teacher leaders* like the *pluralists*¹⁵ the Escola Plural Project would not have succeeded (and stayed) in classrooms for almost fifteen years. Drawing from the literature on education reform (Lieberman & Miller, 2004; DarlingHammond, 2005; Hargreaves, 2006; Fullan, 2008), I interpret these teachers' attitudes and actions as a case of *agency* in transforming the practices of classroom. Moreover, I subsume in the notion of *teacher agency* the intentional actions of teachers at the three settings of this research in striving to reform their classrooms: their leadership efforts and style, and their commitment to learning and leading together (Please refer to Table 2, below, for an expanded list of teacher characteristics linked to *teacher agency*). Let's begin by exploring how teacher leadership shaped success in the practices of *pluralist teachers* in the three schools of this study.

The Leadership Lens

Teacher leadership at the three sites in this study can be described as both formal and informal, prescribed or spontaneous.

¹⁴ Supportive implementers. Please refer to Appendix A for an extended typology based on teachers' characteristics as these interface with levels of policy implementation. to

¹⁵ T-1:Helena (Serrinha), T-7: Carmen (Ilha do Sol), and Marli T-12 (Meia Ponte). Appendix B offers a complete list of teachers and their schools of affiliation.

Whichever way a teacher chose to perform leadership roles reflected a great deal of motivation and commitment from these leaders. Hess (2008) has suggested that "Being a teacher leader begins with wanting to make a difference in the lives of your students" (p. 5) whether teachers are picked to lead or whether they themselves seek to help improve the quality of teaching and learning. Pellicer and Anderson (1995) had already voiced similar views as Hess (2008), by suggesting that successful changes in schools and classrooms have a lot to do with leadership being triggered by teachers' belief and confidence in educational reform. Teachers have to have "credible reasons" for making improvements in practices, given the amount of effort and time needed to get the job done (p. 216). For instance, Hargreaves (2006) reminded us that leadership roles don't have to be necessarily strict and formal, assigned or mandated.

Table 2. Teacher Attributes Associated with Successful Policy Implementation

Leadership	Learning	Community
-self-efficacious	-pre-disposition to learn new ways	-collaborates with colleagues
-translates commitment into actions	-enjoys being challenged	-practices authentic collegiality
-motivates and inspires others	-takes risks	-commits to collective decision-making
-keeps focus on reform agenda	-establishes learning priorities for self and students	-adaptive, flexible
-capacity builder	-studies policies, reflects, reacts	-sees peers as partners in learning and teaching (teamwork)
-taps into internal and external resources	-clear understanding of how students and adults learn	-follows through actions
-advocate of change	-models, demonstrates desirable behaviors	-supports an ethic of caring
-role models practice		-advocates of student-teacher-parent partnership
-encourages collective decisions, reflection		

Source: Quirino de Brito, 2009.

Teachers lead in schools when they assess the real positive gains for students and the sustainability of the proposed practices. Hargreaves (2006) suggests that sustainable educational leadership and improvement is a lateral process that shies away from the hierarchical authority of "transformational" or "charismatic" leaders and opens channels of active leadership for all members of a community. According to Hargreaves,

Sustainable educational leadership and improvement preserves and develops learning for all that spreads and lasts, in ways that do no harm to and indeed create positive benefit for others around us, now and in the future (p. 17).

Sustainable Leadership

Perceptions about spreading sustainable benefits to students and the learning communities of practice in their schools ran high among teacher leaders at the three elementary school sites object of this study: Serrinha, Ilha do Sol and Meia Ponte (Appendix B). *Pluralist teachers* like Helena (T-5, Serrinha), Carmen (T-9, Ilha do Sol), and Marli (T-12), for example, illustrate teacher leaders' genuine desire to capitalize on the novelty of Escola Plural, and its potentials to help students learn better. Each of these teachers was a leader in a different way.

Helena (T-5), for example, a young and ambitious teacher at the beginning of a successful career was the kind of teacher leader that matches well the assertion made by Hess (2006), and Pellicer and Anderson (1995) that “all teachers are and have been leaders”. The advantage of being both teacher and leader made Helena a very special professional for her colleagues. "Her knowledge of Math, and her fresh ideas about how to match concepts with application in class make Helena indispensable for both the veterans and the neophytes in her work groups," says a veteran teacher who counted on Helena's help on the math curriculum. In her second year teaching at Serrinha, Helena had already inspired enough confidence in her peers to the extent that she was helping teach math in three classrooms (more than everyone else) as well as volunteering service to recently formed remedial classrooms. This is what Helena tells me one afternoon about her extra activities at Serrinha: "I really enjoy doing this. I feel blessed I have these skills in math and abstract thinking." And she added: "The only thing that sometimes makes me a little discouraged is when colleagues from the *team* miss class and I have to substitute, and interrupt the activities with my students."

Helena was a quiet, discrete supporter of the Escola Plural Project. Apparently, she had to be: two of the teachers in her *team* were veterans and had not endorsed some of the new policy objectives. For example, Maria was typically conservative in her approach to teaching and belonged to the group I have identified as *the traditionalists* (old school). However, as an instructional leader who was catching up on the new policy ideas and keeping herself current with the state of the art in math, she used the 'collective opportunities' created by Escola Plural to learn from more experienced teachers and to strengthen her knowledge about teaching and children. "Many of my anxieties about what I can do or not in my classes I resolve when I meet with the other teachers on my team or when I get feedback from the pedagogic coordinators. Sometimes I feel insecure, but when that happens I just ask them" (Fieldnotes, Serrinha). Gradually but very assertively, Helena was building confidence in her teaching and, to some extent, enriching the practices of their peers through her math expertise and her effort to read, reflect and understand the new policies and how they intersected with her practice.

In many ways, Helena's leadership engagement with her colleagues echoes discussions of stability and change as in the works of Sergiovanni (2007), Pellicer and Anderson (1995), Hargreaves (2006). As a young teacher, Helena seeks counsel from the experience of her veteran peers, capitalizes on the practical knowledge and sustainable "tricks" of the trade, yet she stands firm to a collective purpose of making schools better for children. As a growing instructional leader, she is moving quickly to a position of decision and influence among her peers, which derives from her creativity, high levels of curiosity and a sense of belonging. Helena's commitment to what she does as a teacher resonates with the 'transformational leader' of which Giroux (2001) and others have postulated in defense of organic professionals determined to resist and change the status quo. In the context of this research, however, I have preferred to refer to leaders such as Helena, Carmen and Marli as *organic* leaders to distinguish them from other types of teacher leadership (i.e., voluntarists and intuitives) working to support the "Escola Plural Project." What is also distinctive about these *organic leaders* in this study is that they possess a predisposition to learn, adapt and incorporate the best instructional practices available. In the next section I will discuss some of the characteristics that made all "pluralists" good organic leaders, and, in particular, effective learners.

The Learning Imperative

As we learned from the overview of the Escola Plural Project above, between 1993 and 1996 the architects of Escola Plural made massive investment in capacity building, including the publication and distribution of six policy documents, 167 staff and professional development workshops, and the hiring and training of 500 new teachers (de Miranda, 2007; Anderson, 2002; Valadares and Villani, 2006). By doing this, these policy-makers recognized right from the start that "... at the heart of policy implementation is an adult learning process" (Wong, 1994, p. 32). Based on the evidence we have seen so far, I want to suggest that the extent to which classroom practices reflected or not the goals proposed by these reformers can *also* be traced to: (a) how teachers took advantage of the new learning opportunities created by the District for teachers to study, reflect, and understand Escola Plural's policy objectives; (b) deliberate attempts to adapt the new practices to the realities of their classrooms; and (c) how public elementary school teachers at the Municipal Education Network in Belo Horizonte redefined their mission to teach traditionally disenfranchised low income students. Following research by Fullan (2008), Beck and Murphy (1996), Sergiovanni (2005), I will refer to this as a teacher's *learning imperative*.

The "pluralist teachers", as active agents of change at Serrinha, Ilha do Sol and Meia Ponte knew that they needed to get a better grasp of the content of Escola Plural's policy and how this policy might play out in the context of their classrooms. They read all the publications printed by the Secretariat of Education, volunteered for leadership positions, attended instructional seminars aimed at explaining the policy procedures, and also participated in virtually all school meetings. But beyond this, they needed not be reminded that classroom realities change, and that school culture is not static.

I don't agree with every word, every intention of Escola Plural's policy. I continue reading, contrasting practice with colleagues, and discovering ways of adapting it. Changing the usual ways we (teachers) teach, plan lessons, and how we work together with other teachers can't be done in a single blow. Breaking away from the normalcy of things takes sorting, selection some evidence that new things do the same or better than the old ones used to. The culture here at school is no different than culture out there... it needs to adjust and change (Marli, Meia Ponte).

Culture, Rogoff (2003) reminds us, "...is formed from the efforts of people working together, using and adapting material and symbolic tools provided by predecessors and in the process creating new ones" (p. 51). Teachers like Marli were not only cognizant of the possibilities of transforming the culture of their schools, but they were also actively working their way to understand, interpret and adapt the new structures to their classrooms. They were collectively learning to lead and improve classroom practices.

According to Elmore (2007), instructional improvement requires continuous learning and a realization that learning is both an individual and a societal activity. "Therefore, collective learning demands an environment that guides and directs the acquisition of new knowledge about instruction" (p. 67). This collective *agency* of instructional leaders at Serrinha, Ilha do Sol and Meia Ponte to some degree put in check traditional views of instructional leadership and learning. These teachers' focus on learning both for students and for themselves gave coherence and stability to agreed upon goals to spread education to each child and create an environment that was unbending to the challenges of educating low income children. Still with Elmore (2007), disentangling ourselves from established norms of habits means

[To] ... transform dysfunctional relationships into functional ones, not by continuing to do what we already know how to do more intensely and with greater enthusiasm, but by learning how to do new things and, perhaps more importantly, learning how to attach positive value to the learning and the doing of new things (pp. 66-67).

Attaching new meanings to learning and teaching, and an explicit acknowledgment that increased capacity would strengthen both, teachers at Serrinha, Ilha do Sol and Meia Ponte were deliberately building new bridges to support student improvement. Marli, for example, was a peer-elected representative for her school and a strong believer that knowledge (i.e., knowledge of school improvement) is acquired through participation in the activities at hand and the helping hands of others. Here is how she clarifies this to me:

I am sure all nine teachers in my group will agree (with me) on how hard it can be to accomplish goals together, especially to develop consensus across disciplinary boundaries. However, if there is one thing I would value the most about Escola Plural it is the possibility that we have had to team-work with other colleagues. Now, for example, I feel much more secure when I assess a student's progress in my class or when I participate in group evaluation with other teachers; it is three, four... heads thinking together, learning together to come up with a best possible understanding of these children's development, which in turn will help us plan future classroom strategies. We are always learning from one another. Also, we learn a lot from our successes and our failures (Marli, T-12).

Marli decidedly "learn walked" with nine other "pluralists" in the pursuit of better solutions for their challenges. "I know no more than the nine teachers I work with. We are all in this together. And, as you have seen in our meetings every Friday, two-and-a-half years later and we are still learning" (Marli, Spring 1998). Helena (Serrinha) and Carmen (Ilha do Sol) were not much different than Marli (Meia Ponte) in their personal and professional investments to becoming better teachers and improve their practices. For example, Helena's intrinsic values about schooling, learning and shared responsibilities led her to become an avid reader and learner of new ways to make math more exciting and fun for her children.

During a faculty meeting on Saturday morning, I asked Helena how she was adapting math in her class to fulfill the new push by the District to make it more fun and palatable to elementary school children. Here is her explanation for her adaptive method:

We've been trying different things. Based on the content decided by the collective of teachers we prioritize the themes and how to link these together. I find it relatively easy to work content and themes during my reading lessons... Early elementary is a lot of fun to work stories, interpret and enact them. Very little I need to do to integrate the new suggestions from Escola Plural. However, math has added a new twist to my teaching. This is an area I still am working on: how do you make math fun, pleasant while you are learning hard concepts? "Ludic learning" is very challenging for math teachers. We are reading, discussing, adding new materials to try to lighten it up. Though focusing on student experiences, their bread and butter have generated increased interest and participation in my classes (Helena).

While Helena seemed to be succeeding in integrating the new math approach and themes to her teaching, she also acknowledged her limitations. She wanted to be able to do more for her students, and get better at what she was doing. Her strategies to improve her skills and pedagogy became obvious when she decided to enroll in education classes at a local university, through her active involvement with other math teachers, and participation in staff and professional development. In many ways, Helena is emblematic of what Hess (2008) has referred to as 'invisible leaders': teachers whose commitment to improving the lives of students goes beyond formal leadership roles. Some of these leaders' characteristics, according to Hess, include a focus on learning *in participation*; a constant search for ways to improve themselves, their classrooms, and their schools; and a willingness to accept change and work with it.

Just like her peers (*the pluralists*) supporting the school improvements proposed by the Municipal School District, Helena was part of a school *ethos* that understood that learning is both individual and collective. Her informed decisions along with her actions to face her new challenges and keep improving practice also revealed that she sought a balance between these two. Although mostly "quietly" (however consistently), Helena's determination to challenge herself was a powerful, authentic form of learning that was grounded, in a deep felt desire to improve learning in her classroom. By exchanging experience with more knowledgeable ones (i.e., veteran teachers), seeking continuing education and adapting practice to her needs she was becoming a real agent of change. As a pluralist, Helena pursued her peers' shared vision to improve the quality of learning for her students. As an *organic* leader, she was building relationships of trust, collegiality, and a common focus that mirrored her community of practice. As facilitators of change, organic leaders like Helena seized the opportunities created by Escola Plural to equip themselves with the skills, knowledge and experience to improve students' success.

The collaborative nature of learning put in motion by Marli and the other *pluralists* in this study echoes Rogoff's (2003) notion of "guided participation" inasmuch as the "peripheral knowledge" of Escola Plural by the various members of the group is pushed to the *center* by the guidance and direction of experienced teachers (i.e., Helena, Carmen and Marli). In The cultural nature of human development, Rogoff (2003) suggests that:

This view of cognition moves beyond the idea that development consists of *acquiring* knowledge and skills. Rather, a person through *participation in an activity*, *changing* to be involved in the situation at hand in ways that contribute both to the ongoing event and to the person's preparation for involvement in other similar events. The focus is on people's active transformation of understanding and engagement in dynamic activities (pp. 254, 282-285).

One consequence of clear organizational focus on new roles and responsibilities (i.e., learning) anchored in participation and collaboration in professional learning communities, adds Elmore (2006), is that it helps promote "... a view of teaching as a body of skill and knowledge that can be learned and developed over time" (p.60). And he continues: learning that focuses on capacity building and the core instructional goals "increases commitment and satisfaction among teachers" (pp. 62-63).

The *pluralists'* high energy, extended commitment and satisfaction seemed to derive, first from their passion to improve the quality of education for their students, and second, from the perception that their shared vision of learning was a concrete necessity woven into the collaborative culture they were constructing together.

When Carmen, a veteran teacher for almost eight years, was assigned an "intractable classroom" in the 1997 school year, her extended responsibilities almost caused her to rebel and dispute the choice made by the instructional leadership group:

My immediate reaction was... I can't do this. I began to ask: why am I being chosen to do this? Can I really handle these students? What if I fail? In the middle of all the changes going on in the District I didn't feel totally confident about my own skills to work with these types of students. The only things I was really sure of was that I was against making a student repeat his grade over and over, and that we needed to do something about it. ... also I began to doubt whether the skills I had were enough to apply the new improvements to a very different classroom, where behavioral issues seemed to dominate your day-to-day teaching. Well, after a sleepless night and much pondering, thinking, I conceded: I will try it (Carmen, Fall 1997).

Classroom observations, together with student comments on teaching, dispelled any misgivings about Carmen's new challenge. When I spoke with Carmen in 1998 she was already half way through her second year teaching her *second cycle* classroom, and her students held "Tia Carmen" in high esteem. Here is how she rationalized to me what made all the difference in working with her "unteachable classroom:"

I did have to grab those little booklets about Escola Plural and really read them. Also, I attended a couple of workshops on literacy and mathematics. These were all part of my first impulse to quiet my high anxiety. However, what really made the difference was the support I gained from everyone on my team, our weekly meetings to clarify the policies, how we were doing... and constant feedback from the pedagogic coordinators on the experiences that were working here at Ilha do Sol and in other schools in the District. Thinking retrospectively, I am glad I chose to face the challenge... I hope this experience has been as rewarding to my students as it has been to me (Carmen, Fall 1997).

When teachers work in learning communities that support a culture of collaboration teachers don't feel alone. Teachers like Carmen found in her school's learning community the expertise, the support and the skills she needed to focus on learning and on teaching. She expanded her knowledge of how to deal with "unteachable students" at the same time that she enhanced the learning potential of her students. Schools' collaborative cultures, according to Sergiovanni (2008), "... are the backbone of dynamic learning communities that bring leadership and learning together. This joining of the two is the strategy successful schools use for working together day by day, for launching change initiatives, and for continuous improvement" (p. 104). He elaborates on the ways these norms of collaboration enable learning: "Communities of practice bubble up as teachers voluntarily support each other's practice by looking after each other, sharing what they know, and in other ways helping each other." (p. 123). In the next section I discuss the "power of community", the third theme in my interpretation of *teacher agency* in Escola Plural's educational reform.

The Power of Community

Teachers who succeeded in implementing Escola Plural's policies in their classrooms were also enthusiastic about their increased reliance on each other's talents and developed an appreciation for their cooperative responsibilities. The prospects of actively reclaiming the role of teacher collaboration and cultivating a sense of inter-dependence in solving student problems generated lots of optimism at Serrinha, Ilha do Sol and Meia Ponte Elementary schools. This sense of interdependence and collective responsibility seemed to be moving teachers from their individual sense of agency to exercise their *professional agency* in their schools. In teaching and leading from the inside out: A model for reflection, exploration and action, Carr, Fauske and Rushton (2008) suggest that "professional agency "takes shape when "[Teachers] ... identify a problem or issue and work for a solution with others who can collectively influence how resources are allocated and how programs are delivered" (p. 10). This emergent collective perception of problem solving and action on behalf of students seemed to mobilize the professional *ethos* of "pluralist teachers" at the three research settings in this study. I will illustrate this progressive merging of *individual* and *professional agency* by drawing on a sample of the various tentative solutions teachers were trying to put into place while dealing with "remedial" or "unteachable" children¹⁶.

¹⁶ Teaching staff and school administrators throughout Belo Horizonte's Municipal School System were experimenting with varied approaches to handle problems with "remedial students" in order to keep them within their age cohort (*ciclo de*

I selected to analyze an experience that was taking place at Serrinha Elementary School ¹⁷ as it highlights evidence of the types of collaboration, teamwork, and instructional leadership I uncovered during my field work.

Once teachers at Serrinha pushed aside their individual preferences (and differences) for coping with remedial students they began to design and apply a plan for action. As far as the design of an immediate action to deal with low performing students, this 'consensual plan' consisted of (a) supporting Escola Plural's proposal not to fail students, which meant that every student would be promoted ("automatically") within (and out) of *learning cycles* without interruption; (b) making a diagnostics of all students performing below grade average for all classrooms; (c) expanding individualized attention to low achievers; and (d) re-organizing classrooms in such a way that small classes would be formed to "accelerate" (catch up) learning for every student in need of instructional support. This "catch up" plan gained immediate support from Serrinha's principal and pedagogic coordinators, and in Fall 1996 "supporting groups and classrooms" were in full activity in both shifts (morning and afternoon).

Based on the new plan for collective assessment of students' strengths and weaknesses drawn by the *pluralists* at Serrinha, evaluation was carried out by the teachers responsible for the respective *learning cycle*, typically two faculty, but sometimes more. Depending of the level of complexity, these teacher collectives would include the pedagogic coordinator and the principal. This was the case, for example, of middle to upper elementary classrooms as they increased in complexity, or in cases of discipline-related issues. Another important characteristic of this collective plan, involved the roles played by the school's pedagogical coordination (coordenação pedagógica) which met regularly every Friday. During the meetings of the pedagogical coordination --comprised of all teachers in the shift plus the school principal, vice-principal and education specialists -- the discussions would generally include specific concerns about individual classrooms and/or individual students. However, whenever there was a more serious problem (e.g. a student's complete lack of interest) or if the teachers' collective agreed that the problem was beyond their control they would bring it to the attention of the school's governing body, and occasionally they would call for a parent-teacher conference.

Integral to the collective responsibilities of Serrinha's Elementary School community was to single out difficulties early in the academic year. This initial assessment gave the teachers the academic subsidy to explore more focused instruction for students in need. By having this diagnostics information early in the year teachers thought they would organize instruction in a way that increased attention would be given to individual students. "Keeping struggling students with the pace of the classroom," states one *first cycle* teacher, who told me she had six remedial students in her morning class, "... doubles up my attention to what kind of learning students are having each day. I get a little stressed, off and on... I have to stay on the alert and keep reminding myself of my purpose here... but in the end I know they [the students] don't become alienated to what their peers are learning. I think it worth it" (T-2, Serrinha)

The *pluralist teachers*, and especially *organic teacher leaders* at Serrinha, Ilha do Sol and Meia Ponte seemed aware of the gigantic responsibility of sustaining student advancement to the next grade level and keeping a balance between passing "scores" and actual academic improvement. Halfway through the second semester of 1996, the *pluralists* found through classroom diagnostics that roughly 25% of Serrinha's 429 students needed some form of extra academic support before being advanced to the next grade. This performance diagnostic was enough to trigger the *pluralists'* creativity and to mobilize the entire school to quickly devise yet another strategy to increase students' possibility to succeed. These teachers decided to organize special classes that would deal specifically with this targeted student population. The teachers at Serrinha decided that these classes would be distributed between the morning and afternoon shifts and that they should be focused on mathematics and Portuguese, the two areas many students still needed academic support. Helena describes her experience with her *accelerated classes* with these words:

formação), avoid learning discontinuity and ultimately eliminate grade repetition. Dalben et al (2000) provide interesting insights on how these practices unfolded in some schools. For example, they suggest, in some cases, how schools grouped students in the "turmas aceleradas" may have resembled the traditional practices Escola Plural was fighting against.

¹⁷ I chose to showcase Serrinha Elementary School's experience, first because teachers there were the first of the three research settings to begin tinkering with "special classrooms" in a systematic and creative way; second, because they were getting very concrete and positive results from their students.

The majority of students in the three classes I teach are quickly catching up with these reviews. Some already read and interpret texts at a grade level. Others are still struggling with basic literacy. In the case of math, for example, some students are finally beginning to process logical and numerical reasoning. But, despite the differences in pace, content knowledge and skills of these mixed classrooms, being smaller units... about half the size of the regular classes we can intervene more directly with each individual student. All teachers on my team are confident that by year end everyone in our special classes will have developed satisfactorily the knowledge they need to advance one more step up within the *learning cycle* or to move on to the next challenge (*second cycle*) (Helena, Serrinha Elementary School, Fall 1997).

When I asked Serrinha's Principal (Clotilde) whether she was surprised by the results from the classroom diagnostics that triggered these special classrooms, this is what she explained to me:

No. The total number of students in these classes can only indicate that some children at this school still need work on Mathematics and Language Arts based on assessment from each collective of teachers (trio)... This is not to say that we do not have students who might be said to be failing, either. That would be too premature to say, or maybe too pretentious to conclude (Principal, Serrinha).

At Serrinha, the teaching staff and the Principal wanted to do things right. They were familiar with the difficulty of teaching low income children in the periphery of Belo Horizonte, but they also wanted to make sure that all students were exposed to as many opportunities to learn as possible as they moved from one learning cycle to the next. These end-of-the-year classes (also called "reforço"/*reinforcement*) were yet another mile these "pluralists" were going together to assure that both students and teachers were focusing on improving the quality of learning.

Final Remarks

This research evolved out of a desire to gain an understanding of the process of educational change as teachers try to adapt, manage and survive yet another school reform. In particular, I wanted to make sense of the differentials of classroom policy implementation as they relate to teachers' varied degrees of involvement and commitment to educational reform. It has always intrigued me both practically and theoretically how disproportionately educational policies trickle down to the actual practices of teachers within the same school or across school sites. For instance, can the education policy implementation gap be filled? How do teachers respond locally to district-initiated, or systemic school programs? What happens when provisions are made for substantial participation and input from practitioners? Seemingly, these questions started to repeatedly emerge over the course of this study. However, the conflictive explanations for such uneven phenomena in policy implementation in education have puzzled me. Education theories have tended to be either too abstract or empirically constrained in their attempts to justify patterns of policy adoption.

Abstract in the sense that some explanations may make reality seem to conform to the theories being articulated, or perhaps because the complexities of schooling are far too rich for what theory can grasp. Some of these theories may have been constraining inasmuch as education researchers underestimate the powers from within theory to explain what goes on in schools and classrooms. For example, in many instances explanations for the success or failure of a particular educational reform in Brazil are construed around the political economy of education and the role of the Brazilian State (Castro, 2005; Paiva, 1993; O'Cadiz, Wong and Torres, 1998; da Silva, 1998). In other cases, scholars attribute changes in schools and classrooms to decentralization of governance and how to rationally balance resource allocation in such a heterogeneous country (Leonardos, 1993; Levin and Lockheed, 1993; Castro 1994; de Azevedo, 2000). Yet others find explanations for the success of a specific type of reform in the idiosyncrasies of groups of practitioners who surpass in energy, activism and drive to transform practice and improve the quality of student learning (de Miranda, 2008; Arroyo, 1999; Dalben, 1998; Oliveira, 2003; de Almeida, 2005).

The theoretical perspective I chose for this research finds its roots in educational research that investigates policy implementation from a micro-level perspective. That is, policy seen from the *lens* of the school and its constituents (school administrators, principals, teaching staff, and students). As such, this study has aimed at addressing the extent to which successful policy implementation in Belo Horizonte's elementary public schools was a function of teachers' active and transformative practices.

It has focused on the dynamic interaction between teacher agency and the culture, structures, and organization of schools as this relationship may provide clues to successful policy implementation. Furthermore, this work has privileged teachers' capacity to learn, to lead, and to teach by making connections with real world experiences which are meaningful to the diversity of students in elementary classrooms.

This research both confirms and challenges findings on educational reform and widespread perceptions on how teachers interact with policy implementation in schools. For example, it confirms that teachers (a) typically adapt policy to the concrete experiences of their classrooms provided that organizational and institutional resources support the changing conditions of teaching and learning (Hargreaves, 2006); (b) retreat in face of policies that do not measure up to their beliefs and goals about education and children (Elmore, 2007; McLaughlin, 1993); (c) react differently to change based on their assessment of the overall benefits of improvement and, predictably positively, if the proposed policies have the potential to enhance the quality of learning for both teachers and students (Cochran-Smith, 2006; Fullan 2008); and (d) improve their practices *most* in those schools where collaboration and reliance on each other have fostered reflection about change and an *ethos* of professionalism (Sergiovanni, 2005; McLaughlin and Talbert, 2008; Darling-Hammond et al, 1995).

By examining how policies get translated into classroom practices through the agency of teachers I show that school structures are neither static nor independent from the daily activities of teachers and students, or from their learning communities. I argue that the cases of successful policy implementation in this study were substantially contingent upon the ways teachers capitalized on their skills, knowledge, and school community resources to improve the quality of learning and teaching. As a microanalysis of educational reform, this study also provides new insights into the actual processes of implementing change. It shows, among other things, that while the current literature on school improvement has made tremendous progress in addressing "teacher professionalism," our knowledge is still incomplete with regard to local responses across school communities. For instance, the findings of this study show that despite increased understanding of teacher leadership, there is a shortage of research that distinguishes between contemporary forms of informal leadership. I illustrate this by providing examples of "spontaneous" and "authentic" teacher leadership supporting the transformation of educational practices.

In this sense, the findings from this research also challenge conventional perspectives on teacher leadership that tend to be restricted to formal functions determined by schools or the district' central office. Whereas this study acknowledges teacher leadership and formal roles in schools (i.e., team leadership, mentorship, instructional coaching) it extends this discussion to include informal leadership functions as the leading kind of active participation of many of the teachers in Belo Horizonte's Municipal School District. For example, alongside with officially assigned leadership there were "spontaneous" *pluralist* leaders genuinely contributing to policy implementation, who felt "it was just the right thing to do." These emerging leaders are teachers who despite not having been assigned formal leadership roles at school nonetheless have become active participants of school reform by developing self-efficacy through focusing on learning and strengthening collaboration with others. Carr, Fauske and Rushton (2008) have suggested that these shifting leadership roles may include, among other things, supporting problem-solving with peers, nurturing authentic relationships, sustaining changes, and caring for the learning and growth of their students. In this process, these teachers become the real advocates of students while they give shape to expanded roles as transformative agents of practice. This *leadership edge* among teachers may have made all the difference in the implementation of *Escola Plural* in Belo Horizonte. This in turn may provide a *new* lens into expanded notions of *teacher agency* as one tries to grasp how teachers teach, learn, and lead, even in adverse circumstances marred by scarce resources.

Appendix A. Teachers' Characteristics Based on Levels of Policy Implementation

PLURALISTS	INTUITIVES	VOLUNTARISTS
-Authentic leadership	-Followers	-Unsustainable leadership
-Collegial	-Cooperative	-Mostly collegial
-Optimist	-Grumblers	-Skeptical
-Pro-active	-Mostly pro-active	-Pro-active
-Risk-taking	-Stability	-Risk-taking
-Open to alternatives	-Open	-Open
-Inter- intra-dependency	-Relative dependency	-Relative dependency
-Reflective	-Enthusiast	-Agenda-driven
-Supports continued interaction with peers	-Unpredictable	-Supportive
-Shares implicit/explicit knowledge	-Inconsistent	-Consistent
-Seeks unity of purpose, goals and expectations	-Random	-Often
-Flexible	-Relatively flexible	-Casual
-Collective action and decision-making	-Peripheral	-Collective
-Models practice	-Teacher-centered	-Teacher-centered
-"Learning to learn"	-Inconsistent	-Consistent

Source: Quirino de Brito, 2009.

Appendix B

Detailed Map of Teacher implementation scores on selected Escola Plural's goals

I. INSTRUCTIONAL AND PEDAGOGICAL GOALS	SCHOOL SITES																		
	[1]					Serrinha [2]					Ilha do Sol [3]					Meia Ponte [4]			
	T-1	T-2	T-3	T-4	T-5	T-6	T-7	T-8	T-9	T-10	T-11	T-12	T-13	T-14	T-15				
<i>A. Interactive Relationship</i>																			
A.1. Dialog-based interaction	3	3	2	3	4	3	4	4	3	4	2	4	3	5	4				
A.2. Responsiveness to student interests	3	4	2	4	5	3	4	3	2	4	3	5	3	4	3				
A.3. Sensitivity to student questions	3	4	3	4	5	3	4	4	3	3	3	5	4	4	3				
A.4. Collective problem solving	4	4	2	3	4	2	4	3	2	3	2	4	3	3	3				
A.5. Building on student thoughts/ideas	3	3	2	4	4	3	4	3	3	3	3	4	3	4	4				
A.6. Equal opportunity	4	5	3	5	5	3	4	4	3	4	3	4	4	3	3				
A.7. Student-initiated dialog	4	3	3	4	5	4	4	3	3	3	3	5	3	3	4				
A.8. Student-centered pedagogy	3	3	3	3	4	3	4	3	3	3	2	5	3	3	3				
Average Scores	3.4	3.6	2.5	3.8	4.5	3.1	4.0	3.4	2.7	3.4	2.6	4.5	3.3	3.3	3.4				
<i>B. Knowledge Construction</i>																			
B.1. Modeling cooperative behavior	3	3	2	3	4	3	4	3	2	3	2	4	3	3	3				
B.2. Scaffolding (ZPD)	4	4	2	3	5	3	5	3	3	3	2	4	4	4	3				
B.3. Student-pairing (high-low ability)	3	4	2	3	4	3	4	3	2	3	2	4	3	3	3				
B.4. Targeting learning styles	4	3	2	3	4	3	4	3	3	3	2	4	3	3	3				
B.5. Student-volunteering help	3	4	3	3	4	3	4	3	3	3	3	4	3	3	3				
B.6. Seeking help from others	3	4	3	3	4	4	4	3	3	3	3	4	4	2	3				
Average Scores	3.3	3.7	2.3	3.0	4.2	3.2	4.2	3.0	2.7	3.0	2.3	4.0	3.3	3.3	3.0				
<i>C. Active Student Participation</i>																			
C.1. Teacher-induced participation	4	4	2	3	4	4	4	3	5	3	2	5	3	4	3				
C.2. Democratic practice	4	4	2	3	4	4	4	3	3	3	2	4	4	4	3				
C.3. Spontaneous involvement	3	3	3	3	4	3	4	3	3	3	2	4	3	3	3				
C.4. Helping each other	4	3	3	4	4	4	4	4	3	4	3	5	4	4	3				
C.5. Student volunteering for activities	4	3	3	4	4	3	4	4	3	4	3	5	4	3	4				
C.6. Student-originated activities	3	3	2	3	4	3	4	3	3	3	2	5	2	2	3				
Average Scores	3.7	3.3	2.5	3.3	4.0	3.5	4.0	3.3	3.3	3.3	2.3	4.7	3.3	3.2	3.2				

Source: Quirino de Brito, 2009.

Detailed Map of Teacher implementation scores on selected Escola Plural's goals
(Cont'd. ...)

II. CURRICULAR GOALS	SCHOOL SITES														
	Serrinha [2]					Ilha do Sol [3]					Meia Ponte [4]				
[1]	T-1	T-2	T-3	T-4	T-5	T-6	T-7	T-8	T-9	T-10	T-11	T-12	T-13	T-14	T-15
D. Diversity and Scope															
D.1. Exposure to multiple perspectives	4	3	2	3	5	4	4	4	3	4	3	5	4	4	3
D.2. Physical-intellectual-emotional processes	3	4	2	4	5	3	4	3	3	4	2	5	3	3	2
D.3. Flexibility (sequence and scope)	4	3	2	4	5	4	4	3	3	3	2	5	4	5	4
D.4. Sensitivity to students' socio-economic background	4	4	2	4	5	4	4	4	5	3	2	5	4	4	3
D.5. Experiential activities (societal contexts)	3	3	2	3	5	3	4	4	3	3	2	5	3	3	3
D.6. Adapting content to students' interests/needs	3	3	2	3	4	3	4	4	3	4	2	5	3	4	3
Average Scores	3.5	3.3	2.0	3.5	4.8	3.5	4.0	3.7	3.3	3.4	2.2	5	3.5	3.8	3.0
E. Student Socio-Cultural Reality															
E.1. Bonding content to student context	4	3	2	4	5	3	4	4	3	3	2	5	3	4	3
E.2. Distinguishing facts from fiction	3	3	2	3	4	4	4	3	3	4	3	5	4	4	3
E.3. Drawing content from student background & experiences	4	4	3	4	4	4	4	3	3	3	3	5	3	3	3
E.4. Linking learning with the potential to transform real life situations	4	4	2	3	4	4	4	3	3	3	3	5	3	3	3
E.5. Student indirectly refers to their life situations	3	4	3	3	4	3	3	3	3	3	2	5	3	3	3
E.6. [Students] make explicit connections to their socio-cultural reality	3	4	3	3	4	3	4	3	3	3	3	5	3	3	4
Average Scores	3.5	3.7	2.5	3.3	4.2	3.5	3.8	3.2	3.0	3.2	2.7	5.0	3.2	3.5	3.0
F. Interdisciplinary Project and the Thematic Approach															
F.1. Holistic/global approach to knowledge	3	3	2	3	5	4	4	3	3	3	2	5	3	3	3
F.2. Linking topic/content to the disciplines	4	3	2	3	4	4	4	3	3	3	2	5	3	3	3
F.3. Developing clear examples of links between subject, themes and the academic disciplines	4	3	2	3	4	3	4	3	3	3	3	5	3	4	4
F.4. Applying multiple pedagogical resources (i.e. visual, auditory, kinesthetic) to facilitate learning	4	3	2	4	4	2	4	4	3	3	2	5	3	3	3
F.5. Student shows evidence of link between topic/content and the academic disciplines	4	3	2	3	5	2	4	2	3	3	3	4	3	3	3
Average Scores	3.8	3.0	2.0	3.2	4.4	3.0	4.0	3.0	3.0	3.0	2.1	4.6	3.0	3.2	3.2

Source: Quirino de Brito, 2009.

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