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ABSTRACT

This article examines an innovative and systemic school reform effort launched by Paulo Freire during his tenure as Municipal Secretary of Education for the city of São Paulo. The overarching goals of this reform were the democratization of access to schooling, the transformation of classrooms and school sites into democratic centers for the problematization, celebration, and transformation of popular knowledge, and the creation of critical and participatory citizens. This paper explores the implementation process that was designed to facilitate this ambitious reform. The analysis concentrates on the various institutional mechanisms created to support teachers' efforts in learning the necessary skills to realize the reform's objectives and assesses their overall effectiveness as policy implementation tools. Data from school site visits, interviews, and teacher surveys informs this study.

CONSTRUCTING A PUBLIC POPULAR EDUCATION IN SÃO PAULO, BRAZIL: Institutional Structures and Local Building Blocks

Introduction

We dream of a school that, because it is serious, is dedicated to a form of competent teaching, a school that also generates happiness. What there is of seriousness, even painful, work-intensive, in the process of teaching-learning, and knowing does not transform this task into something sad. On the contrary, the joy of teaching-learning should accompany teachers and students in their constant yearning for joy and knowledge. [And] we dream of a school that is in reality democratic, that attends for this reason, to the interests of underprivileged children...¹

The preceding excerpt expresses key ideas in the message that Paulo Freire has spread to educators worldwide for at least three decades. Not only has he communicated his profoundly humanistic vision to others but he has worked actively to put his ideas into practice on many occasions and in many settings. In 1989, when he joined Workers' Party (PT) Mayor Luiza Erundina's municipal administration as Secretary of Education, he

received the opportunity to make this joyful and democratic school a reality for thousands of people closest to his heart: the children of the City of São Paulo.

Under Freire's leadership, the Municipal Department of Education (MDE) implemented many programs which were designed to address the following overarching objectives of the PT administration: (1) increased access to schooling²; (2) democratization of school administration³; (3) an improved quality of instruction; (4) education for working youths and adults; and, (5) the formation of critical and responsible citizens. Among these programs were the Movement for Curricular Reorientation (the Interdisciplinary Project), Continuing Professional Education Groups (for teachers, pedagogic coordinators, and school directors⁴), the Genesis Project (a computer instruction program), and MOVA (the Movement for Youth and Adult Literacy).

In this article, I will analyze the policy implementation strategy that Freire's administration used to bring about the real changes in classroom practice that were expected to move the public education system in the direction of the PT's objectives. My analysis will focus on the idea that fundamental to the implementation of policy is a process of adult professional learning. As Darling-Hammond states,

...teachers teach from what they know. If policymakers want to change teaching, they must pay attention to teacher knowledge [and make] investments in those things that allow teachers...to grapple with transformations of ideas and behavior.⁵

Using this analytical framework, I will examine the learning process that Freire's administration designed for teachers as they embarked on their journey to change the "face" of public schooling. I will highlight two interrelated MDE programs: the Interdisciplinary Project and the Continuing Teacher Education Groups.

The article begins with a discussion of the central research problem and then provides an overview of the context within which the Interdisciplinary Project and the Continuing Teacher Education Groups were implemented. After a brief description of each program, I will focus on a central component of the adult learning process that linked these two programs together: meetings. Using data⁶ collected from seven schools participating in the Interdisciplinary Project, I will present the various ways that these meetings were organized and conducted at schools. Finally, building on an analysis of the causes of the variations in implementation at the school sites, I will discuss the wide ramifications that this ambitious educational reform effort offers on a number of topics including the dynamics and politics of educational change and reform, the policy implementation process, and teachers as social change-agents. These insights should prove valuable to Brazilian and other international scholars and practitioners alike.

The Research Question

The idea of schooling as a force for social change and teachers as change-agents has been debated in many different circles, producing a variety of conclusions. Some scholars view education as having inherent individual and collective value.⁷ Others argue that as an institution of the state, public education systems cannot be expected to contribute to positive social change⁸ and are, rather, an instrument for the reproduction of the capitalist class structure.⁹ Still others contend that more than furthering the cause of economic determinism, schools play a crucial role in ideological reproduction that can be resisted through fundamental changes in curriculum, pedagogy, and governance.¹⁰ Finally, there is the argument that struggles to change the role of schooling must be linked to broader mobilizations for social change occurring in society.¹¹

This article combines the latter two arguments, drawing on the work of scholars such as Giroux, Apple, and Carnoy and Levin. In the São Paulo case, we see a series of educational reforms that are connected to broader social movements (which elected the PT government into office and maintained a dialogue with the administration throughout its tenure) and seek to reorient and transform the very nature of teaching and learning in public schools. The main purpose of this article is to examine how and, more importantly, under what organizational conditions at the schools teaching and learning were transformed. This examination, moreover, will offer a broader understanding of the nature of the school change dynamic in São Paulo and its relationship to social struggles and transformations in the wider arena.

Paulo Freire and the Municipal Department of Education (MDE)

As Secretary of Education, Freire was responsible for a school system that included 678 schools, 700,000 students, and 33,000 teachers, and served an ethnically, culturally, and economically diverse population. To make progress towards its pursuit of democratized access to schooling, democratization of school administration, improved quality of instruction, and the formation of critical and responsible citizens, the MDE sought to foster the local development of educational programs that worked towards the following five objectives:

- (1) Transformation of the relationships between educators and those being educated;
- (2) Reconceptualization of the knowledge production process;
- (3) Redefinition of the content areas covered in school curriculum;
- (4) Reorientation of the understanding and use of school curriculum; and,
- (5) Transformation of the role that schools play in students' lives and in communities.¹²

Figure 1 provides a more detailed overview of the five objectives.

A brief discussion of the context within which these objectives were to be developed provides greater understanding of the enormity of the MDE's ambitions. First, the PT's electoral mandate limited their efforts to a short period of three years within which to develop and implement their reforms.¹³ As it turned out, the PT was not re-elected in the November 1992 municipal elections and the reforms initiated by the PT have been largely eliminated or substantively reworked. In addition to this limited reform period, the PT was challenged by the overall state of public education in the city. A few

examples illustrate the sorry situation. In 1989 it was estimated that over a million pre-school and primary school age children in São Paulo were not enrolled in schools, due to limited capacities. An entering teacher earned slightly more than a domestic worker. Grade retention and drop out rates were disturbingly high. Because the previous administration did not offer certification exams, thousands of teachers were working under temporary contracts, resulting in significant understaffing at many schools. Sixty percent of all school facilities required major structural and cosmetic repairs due to collapsed ceilings, exposed electrical wiring, and faulty plumbing. The district owned two trucks which serviced the distribution needs of a system that covered 1,500 square kilometers. Finally, the PT administration faced a multi-million dollar deficit in the educational budget upon its inauguration into office.¹⁴

The MDE launched an extensive capital improvement campaign which involved repairing existing school facilities, constructing new facilities, and distributing supplies to schools (including 60,000 new desks, 78,000 books, 825 microcomputers and more). In addition, new funds were distributed to allow for substantial increases in teachers' salaries (resulting in raises 300 percent above the minimum wage).¹⁵ Significant gains were made in the area of teacher certification and workplace conditions. The administrations efforts also resulted in steady increases in student retention and recruitment.

The Interdisciplinary Project & the Continuing Teacher Education Groups

The reforms that the MDE initiated during the PT's tenure were unlike any other educational reform effort ever introduced to the educators in São Paulo's public school system. They called for democratization of schools in a society just beginning to emerge from 25 years of military rule. Their theoretical foundation was based on the principles of constructivism, challenging most of the technicist and modernist orientation of policies preceding it. They required active involvement in the development of curriculum on the part of educators who were accustomed to using "teacher-proof" instructional packages. They attempted to empower educators by providing more autonomy than they had ever experienced but simultaneously required much broader and more intense participation from them. They offered interested educators opportunities to work collaboratively with their colleagues and with students and parents, despite their profound lack of experience in such dynamics and limited training. Finally, they made an explicit political choice to place public education at the service of poor and working class communities. In doing so, the PT's reforms pushed all involved to examine more critically their own lives in relation to the education of Brazilian children, and poor children in particular.

These aspects of the PT's reform program posed challenges for all of the school communities that opted to participate in it. It was not an easy process for any of the participants because it forced teachers to turn a critical eye towards their own longheld convictions and standards of education and to move toward transforming them. Such reflection, transformation and change, especially on an individual level, was problematic

for all teachers involved. A teacher from a school progressing well in the implementation of the Interdisciplinary Project concurred,

"[The Interdisciplinary Project is] a process [of self-examination] that you **have** to go through and it's not easy. [The fear and anxiety are] something that you have to conquer" (Sergio).

Or as Fullan observed,

*...all real change involves loss, anxiety, and struggle....Real change, then, whether desired or not, represents a serious personal and collective experience characterized by ambivalence and uncertainty; and if the change works out it can result in a sense of mastery, accomplishment, and professional growth.*¹⁶

Freire's administration appeared to be cognizant of these aspects of educational change and designed an implementation process that was firmly grounded in the idea of professional learning through reflection, dialogue, and research. Such professional learning, furthermore, would serve as a vehicle for achieving policy objectives in school site and classroom practice. In this section, I describe the Interdisciplinary Project and the learning processes, both formal and informal, which fostered its implementation.

The attitudes and orientation of the PT administration towards the purpose and process of education as well as its ideas for curriculum development were strikingly different from what had traditionally characterized the MDE in São Paulo. In a document summarizing the state of public education upon the 1989 election victory, the PT argued that although "...all teachers do theory and practice," education remained a profession in which teachers

"...walked a solitary road, resulting in a practice which had crystallized and was never modified, whose theory was neither made explicit nor questioned."¹⁷

In order to work towards some of the PT administration's ambitious goals, the MDE developed an elaborate and intensive implementation process that focused keenly on reorienting teachers' attitudes and behaviors and developing new pedagogy and understanding. This process focused on six key elements:

- (1) a week long series of introductory seminars held either at the University of São Paulo in conjunction with the Directorate of Technical Orientation (DOT)¹⁸ staff and university professors (from University of São Paulo, University of Campinas, and the Pontifical Catholic University of São Paulo) or at the Nuclei of Educational Action (NAE)¹⁹ facilitated by DOT and NAE staff;
- (2) creation of Continuing Teacher Education Groups which offered regular opportunities for dialogue, exchange, and reading for teachers through the provision of ten paid hours of meeting time per week at schools; periodic meetings by grade levels and subject areas for teachers in the same region; and, an annual week-long district-wide conference;
- (3) the provision of challenging theoretical texts with which to orient reflection and discussions (including two series: Stories from the Field and Formation Notebooks);
- (4) regular technical assistance and coaching from NAE staff (two NAE staff were assigned to each school and each NAE also had specialists in the different subject areas);
- (5) regular opportunities for professional development courses (including workshops dealing with using media, journal articles and literature to develop classroom reading materials, the use of Socratic questioning, the contributions of Afro-Brazilians, Sexuality in the Classroom, etc.); and,
- (6) a curriculum development process (i.e., the Interdisciplinary Project) which was supported by these other five activities.

In actuality, the main focus of the teachers' efforts was on the Interdisciplinary Project which had as its central objective the reorientation of the school curriculum. Each of the other components of the MDE's program provided strong support for the teachers' work on this Project. Of these components, furthermore, the key activity was teachers'

participation in the Continuing Teacher Education Groups. Both the Interdisciplinary Project and the Continuing Teacher Education Groups are described in depth below.

The Interdisciplinary Project

At the PT's initiation, the MDE underwent major organizational restructuring which included replacing career bureaucrats with practicing teachers and school site administrators and decentralizing fundamental decision-making powers and instructional policy decisions (particularly those related to curriculum development) to the local school sites. In addition, reform programs and new policies were developed through a constructivist process that solicited input from a variety of sources (students, teachers, parents, regional administrators, etc.) through a systematic and continual schedule of meetings and forums.

One product of this constructivist dynamic was the Interdisciplinary Project, a voluntary curriculum reform effort offered to interested schools. This Project provided a four-phased framework for the interdisciplinary and democratic development of curriculum via the generative theme. The first phase involved school staffs engaging in a deliberate and informed process through which they considered participation in the Interdisciplinary Project. An affirmative decision then required the submission of a proposal detailing the work they expected to do as participants in the Project. The second phase involved a Study of the Reality, a product of which was the school's generative theme. In the third phase, teachers organized the content of their various disciplines around the generative theme; this was called the Organization of Knowledge. In the

fourth phase, teachers designed exercises, activities, and projects through which students applied their knowledge (known as the Application of Knowledge). These curriculum and instructional activities are described in more detail below.

Freire developed the concept of the generative theme in the early 1960s during his work with pre-literate adults in rural Northeastern Brazil. This concept was somewhat reworked for an urban, formal, and mass education system involving primary grades. The MDE presented the concept of the generative theme to educators in this way:

...the generative theme....is one path towards getting to know, understand, and intervene critically in a particular studied reality....[It] presupposes a methodology that believes in the growth of the individual through collective work, discussion, problematization, questioning, conflict, [and] participation...in the appropriation, construction, and reconstruction of knowing....[It] is the interdisciplinary point of encounter for all of the areas of knowledge.²⁰

In schools then, the generative theme expressed some fundamental issue or conflict that was significant to that particular school community. This theme was used to unify and link the different disciplines at the school, so that content and subject matter were taught in an interdisciplinary manner, emphasizing the interrelatedness of all aspects of the issue.

The schools arrived at their generative themes through a Study of the Reality where teachers worked collaboratively to collect data on their school community. Such data included demographic information, income statistics, surveys of parents, interviews with students, polls of neighborhood businesses, clinics, and other agencies, and observations. Upon completing the Study of the Reality, the teachers assembled and analyzed these data, pulling out issues that were of significance to the community. From

these issues, the teachers selected one which became the generative theme for a particular unit and time period.

In the next phase, Organization of Knowledge, teachers from different disciplines organized the content areas in their subjects around the generative theme. For each subject area, a list of different generative questions were developed. The answers to these questions would be found in the content areas of the disciplines. Working with the students to develop responses to these generative questions would encourage their exploration of the subject area as well as train them in skills used in the particular discipline. Teachers were encouraged to use a wide variety of resources including newspapers, field trips, guest speakers, journal articles, literature, and audio/visual aides.

Finally, the learning process came full circle with the Application of Knowledge phase. During this final phase teachers designed exercises in which students applied their new knowledge to particular situations or real problems associated with the generative theme or generative questions.

Figure 2 outlines this three phased process for curriculum development using the generative theme. Figure 3 is a reproduction of a worksheet used by teachers at one school in the study to organize a unit on the generative theme of "The Evolution of Work and Current Perspectives" and the generative question, "Work and employment: are they an instrument of societal transformation? Do they improve the lives of workers?" In this worksheet, teachers from different disciplines outlined the major content areas that they planned to cover in discussing the generative theme and question.

Throughout the Organization and Application of Knowledge phases, teachers were encouraged to use a pedagogy that drew from a plurality of sources and created opportunities for students to explicitly construct their own knowledge particularly through interactions with their peers and the teacher. The basis for this pedagogical approach was heavily influenced by L.S. Vygotsky and Henry Wallon. The work of both scholars made significant contributions to the MDE's elaboration of an appropriate pedagogy for the Interdisciplinary Project where teachers were expected to work collectively with students, on an individual and group basis, guiding and encouraging their progress through, what Vygotsky has termed, their zone of proximal development.

Figure 4 illustrates the ways in which teachers followed this constructivist process. In this worksheet, we see that teachers planned to create situations where students engaged in a learning process that mirrored the three phases described earlier for the teachers' development of curriculum. Students conducted a study of the reality to collect basic data to inform their understanding of the generative theme. Such data may have been recollections of their own experiences related to the generative theme, interviews with family members, on-site observations, and consultation of various written resources such as print media and archival records.

After this, students organized this knowledge through the exploration of the different content areas. Finally, they entered the application of knowledge phase where they used these concepts and information to prepare a project of some kind that illustrated their understanding of the different subject areas as they related to the generative theme. As Figure 4 illustrates, students had opportunities to develop a variety of expository,

research and analytic skills, covered a wide range of concepts and applications, and demonstrated their knowledge through written, artistic, and dramatic work.

Continuing Teacher Education Groups

Participation in the Interdisciplinary Project entitled teachers to an extra 10 hours per week of paid time²¹ to be spent working together as a whole faculty in professional development activities. One runs the risk of using a term such as professional development because it conjures up images of interminable afternoons "downtown" listening to a career administrator give instructions about the use of a particular manipulable for the math classroom. This type of professional development was not what Freire's administration envisioned. The core of the MDE's professional development program under the PT centered on the Continuing Teacher Education Groups. The MDE viewed these professional development groups as providing educators with

"...a necessary space for reflection on their practice and knowledge....and moments for exchange that validate the social, affective and cognitive being....The basic link for this construction is the routine, but a lively rather than static routine....Observation, recording, reflection, synthesis, evaluation, and planning are the methodological instruments to be utilized in these Professional Development Groups."²²

This weekly allocation of professional development hours was designed to provide teachers with an opportunity to engage in the following types of activities:

- development of Project phases (i.e., collect or analyze data from the Study of the Reality, develop generative theme, design application of knowledge exercises, etc.);
- reading and discussion of theoretical texts supplied by the MDE and other materials found in journals, libraries, etc.;
- discussion of classroom practice and its relation to the theoretical questions posed in texts; and,

- independent research by teachers into areas of interest at their school.

These six components of the MDE's professional development plan coordinated nicely to provide a learning process that emphasized reflection on what was known (teacher's own classroom practice and their students' realities), the use of theory to expand upon what was known, and distinct opportunities (organization and application of knowledge) to experiment in the transformation of these realities. Furthermore, each of these activities occurred through collective efforts, where teachers forged new partnerships with each other and other stakeholders in the school community (e.g., students, parents, administration).

School Site Realities

Despite the universal challenges and difficulties of developing the Interdisciplinary Project, there were some schools that managed to confront, overcome, and transform their struggles into full Project implementation and fulfillment of many of the MDE's goals. Observations of these schools revealed classrooms abuzz with student activity, students eagerly participating in discussions and unabashedly questioning ideas and concepts, and teachers actively working with other teachers. In these schools there also tended to be positive and productive working relationships between teachers and administrators and between school staffs and parents.

Other schools, however, remained somewhere between partial implementation of the Project and outright resistance to it. In these schools teachers struggled with the concepts and ideas underlying the Project, at times expressing frustration or outright

resistance to its various premises. Classrooms continued to be teacher-centered, students often appeared disengaged from the material, discipline problems were issues commonly discussed among teachers, rigid demarcations continued to exist between teachers of different subject areas, and parents were typically scapegoated for a variety of problems at the school.

Though participation in the Project was voluntary and the MDE made serious attempts to develop a comprehensive implementation strategy that provided teachers with a transformative learning process, the Project nevertheless clearly originated from a central administrative perspective. This perspective, furthermore, could not accommodate all of the different expressions of governance, organization, and pedagogy that were represented in the 650 public schools in the district. In this section, I briefly describe one aspect of the implementation process -- the ten hours of paid meetings time provided to Project participants -- in an effort to explore the school site realities with which these central office perspectives interacted.

As described earlier, upon formally entering²³ the Interdisciplinary Project, teachers were required to spend ten hours a week in meetings. The purpose of these meetings was to provide teachers with:

"...a necessary space for reflection on their practice and knowledge....and moments for exchange that validate the social, affective and cognitive being....The basic link for this construction is the routine, but a lively rather than static routine....Observation, recording, reflection, synthesis, evaluation, and planning are the methodological instruments to be utilized in these Continuing Teacher Education Groups."²⁴

Table 1 highlights the meeting schedule followed at each of the schools in this study and lists characteristics of each school's administration.

The quality and character of these meetings varied with the extent of Project implementation at each school. At three schools in the study, where classroom practice clearly reflected MDE objectives, the daily meetings had become an important element of the teachers' routine. At one school the faculty engaged in two types of meetings each week. On Mondays and Wednesdays teachers met without the pedagogic coordinator and often in these meetings they worked in groups by grade level. During Monday/Wednesday meetings the teachers worked on curriculum projects, shared classroom readings and assignments, discussed students' work, planned projects and/or events, and completed various tasks required for subsequent meetings that week.

On Tuesdays and Thursdays, meetings adhered to the following schedule:

1. Plan the next meeting (i.e., choose a topic and presenters)
2. Review summary of previous meeting
3. Other business (often people had announcements)
4. Snack (always prepared by someone from the group)
5. Practicum: Theory and Pedagogy. A pair of teachers presented the topic of the meeting.²⁵
6. Questions and group discussion
7. Group evaluation

In the practicum, the group discussed topics including the notion of working with student errors to create learning opportunities, drugs and adolescents, the influence of the popular media on children, and different techniques for teaching reading.

At another school, meetings tended to concentrate more specifically on MDE publications. Teachers were typically assigned a reading for the week which they read prior to the meetings and then discussed as a group (often very heatedly) during the meetings. Unlike the first school where pairs of teachers facilitated meetings, the meetings at this school were mostly run by the pedagogic coordinator, although most of

the teachers participated in discussions and debates. Meetings focused on readings of work by Piaget, Vygotsky, and Wallon, with discussions about issues such as how and where knowledge is produced and whether the production process occurs within a social context (Vygotsky) or is a more purely individual process (Piaget).²⁶

In another school, meetings focused on more practical issues -- the development of a unit on recycling. In the initial meeting, the teachers spent some time in a debate about recycling, what skills the students would learn in each subject area, and whether or not recycling was the most pertinent and/or appropriate topic to be addressed to the students at the time. During the subsequent meetings the teachers concentrated on developing their main objectives for the recycling, tying this recycling unit to the overall generative theme at the school, and designing some recycling activities such as a compost bin using food waste from the kitchen and paper and tin can recycling.

That teachers felt their meeting time was well spent is reflected in their responses to the selected questionnaire items, as documented in Table 2. These questionnaire data reveal that for the most part, teachers at these schools saw an important value in meetings in terms of the function they served for curriculum development, school governance, and school relations. The low standard deviations on some of the responses reveals quite a high degree of unity around certain issues, notably efficacy in problem solving.

More telling than these questionnaire responses, however, are some of the many comments that teachers offered describing the role that meetings played in their professional lives. A teacher at one school noted,

...with the Interdisciplinary Project we have a structure. We have regular meetings that we have to come to. But we've made really good use of

these meetings....And the meetings have been very good for us as well because we now have a scheduled time -- as well as a special space -- to meet with each other and do the work we need to do. This has been very important. So we may not have a specific thing to discuss or work on, but as we have this time together, it just becomes easier, almost a natural thing to have this exchange (Marcia).

A teacher from another school echoed similar thoughts,

...the collective hour really helped us a lot. We get together, read different articles, discuss ideas, confer about different students and classes. This has been very interesting and beneficial for us... (Gina).

A teacher from a third school asserted,

I think also that there are some teachers [at other schools] that don't really know what to do with the collective time. So they may have times set aside, but they don't know how to use them....They aren't interested in doing something productive. This [collective] time is so important for us. We exchange so much information and [so many] ideas (Lucy).

Meetings at other schools, where classroom practice remained fairly traditional, were not as uniform, regular or productive as those in the schools described above. One school followed a fairly routinized weekly schedule but, these meetings were some of the more uncomfortable gatherings I witnessed. The teachers rarely interacted with one another, though they often sat around the same table together. Not once in eight meetings did teachers reflect on their practice in the classrooms, read together selections from an MDE publication, or plan a unit using the generative theme. Many of these teachers gave the distinct impression that their presence at the meetings was more a matter of punching a time clock than a commitment to or connection with the Interdisciplinary Project.

At another school, Mondays were the only time that the entire faculty met as a group for the Interdisciplinary Project. This meeting typically began at 1:00 pm and continued until 6:00 or 7:00 pm. Because of her many commitments, the pedagogic

coordinator rarely arrived at the meeting before 3:00 pm. As a result, teachers pursued a variety of activities prior to the pedagogic coordinator's arrival: some teachers graded papers, one pair of science teachers always planned lessons together, others chatted among themselves, and still others just relaxed and smoked cigarettes. Once the pedagogic coordinator arrived, the staff addressed whole school issues. However, as this was one of the few guaranteed times that the entire staff met, these issues were often administrative in nature rather than the research, learning, and planning envisioned by Project designers.

While at some schools faculty meetings focused on issues as diverse as Piaget's theory of individual intellectual development and the implications of Brazil's political history on educational policy, discussions at this school centered around disruptive children at the school, parents' lack of respect for teachers, and details about teachers' personal lives. Contrary to teachers' perceptions, I found these students to be some of the better behaved and more orderly children. Interestingly too, in one-on-one conversations with some of these teachers, it was clear that their interests lay in more serious and compelling areas such as pedagogical theory, epistemology, current municipal politics and the like. Yet, in the large group, these issues were avoided for more mundane and possibly less threatening topics.

Finally, at other schools there seemed to have been a breakdown on all fronts. At these schools, there were no regular procedures for meeting, no regular meetings, and no alternative avenues for staff to communicate and share ideas and experiences. Usually, the pedagogic coordinators at these schools, while enthusiastic about the Interdisciplinary

Project, were not effective in conveying their enthusiasm to or mobilizing the staff around their ideas. The result was a total breakdown in formal internal structure where all actors embarked on their own often contradictory courses.

Conclusion

In the introduction to this article, I indicated that the central focus of this research was to understand the conditions under which teachers' classroom practice changed to meet the PT administration's reform objectives. At the outset, it appears that the school characteristics that appeared most conducive to encouraging a classroom practice that fulfilled MDE objectives included: a small staff, continuity in staffing, positive personal relationships, collective understanding and consensus around key school issues and procedures, and full commitment on the part of the school community to the Project's goals and objectives. (Table 1 provides an overview of many of these characteristics.) While each of these characteristics (and others unique to each school) contributed to the overall implementation process, it is important to use these data to delve deeper into an exploration of the underlying dynamics that facilitated or prevented the development of these features at the different schools in the study. In order to do this more comprehensive inquiry, I offer a final analysis on the reform effort and learning process provided by the PT administration.

It seems clear that the MDE, under Freire's guidance, created a comprehensive network of formal institutional support for the implementation of the Interdisciplinary Project. Formal administrative policy-making channels incorporated practitioners' voices

and experiences. Reform projects focused on essential issues of teaching and learning. Teachers enjoyed dramatically improved material and physical conditions as well as regular technical support. They also gained considerable autonomy over key aspects of their professional lives; not only did they exercise considerable control over curriculum development but they were also given the option of participating (or not) in the MDE's reform efforts.

Despite these formal supports, which were theoretically met by grassroots mobilization (i.e., voluntary participation in reform programs), my observations revealed that the changes in classroom practice were not as widespread as one might have expected. There are several interconnected explanations for this finding ranging from the straightforward to the critical.

First, the São Paulo experience once again emphasizes the difficulties of changing teacher practice and with it school practices, routines, and cultures. Regardless of the myriad institutional supports in the form of workshops, training, focused meetings, technical support, additional wages, and so on, the lack of a commitment to the ideals and philosophy of the reform programs on the part of some school staffs effectively nullified the transformative potential of the PT's institutional encouragement.

Because of this, we can conclude that something must be done to develop in teachers the compulsion and motivation for embarking on the difficult journey of unlearning and reinterpreting past practices and learning and internalizing new practices, beliefs, and attitudes. Three alternatives arise from this conclusion: (1) multiple incentives may be necessary to galvanize a broad cross section of educators to the goals of a reform;

(2) the expectation that changes in all schools are possible must be abandoned; and, (3) additional refinement of the learning process is required.

In the case of the PT's reform project, there was no room for multiple incentives. Their position was very clearly oriented toward constructing a public education that would serve the liberatory interests of the popular classes. Although the PT was particularly explicit and single-minded in the expression of their goals, it is fair to surmise that the incentives offered by any reform are tied to its overall objectives such that varying them would harm the integrity of the reform and dilute its general aims and purposes.

To a certain extent, the PT seemed to acknowledge the fact that all schools may not have been able or willing to implement their reforms. They attempted to address the situation of these teachers and schools by enrolling participants in the Interdisciplinary Project on a voluntary basis. At the same time, the purity of this voluntarism should be scrutinized. First, many teachers expressed skepticism about the real autonomy of schools to opt not to participate in the PT reforms. Their suspicions were due in large part to the MDE's bureaucratic history of mandating programs, pedagogy, and curriculum packages. Some teachers who "volunteered" to participate in the Interdisciplinary Project basically did so because they had always responded dutifully to official mandates. Second, many teachers were lured towards Project participation because of the substantial benefits that accrued to Project participants primarily in the form of additional wages and technical assistance. Thus, it is not clear that the strategy of voluntary participation worked effectively in weeding out Project resisters or saboteurs.

What may have proved a more effective process relates to the third option: a critical analysis of the learning process which accompanied Project implementation. My original premise was that full policy implementation was intrinsically tied to a process of adult learning. My analysis of the MDE's programs and their expression at the schools (primarily in meetings) provides some insight into the strengths and weaknesses of the learning process offered to teachers.

The strengths relate mostly to the opportunities that teachers (at schools fulfilling Project goals) enjoyed for exploring and developing a deeper understanding of primary Project components and theoretical foundations, their own disciplines, their colleagues' disciplines, and a variety of issues germane to their students and school community. In addition to the learning which occurred in these areas, the meetings generated additional more spontaneously produced knowledge. For example, teachers at one school actually created their own category for learning through the presentations given in Continuing Teacher Education Group meetings. Through these presentations, teachers explored issues of interest and relevance to their school (that may or may not have directly linked to the generative theme) and they learned a variety of new skills including oratorical skills.

Another example highlights the cumulative value of these meetings. Having a regular time and space for dialogue and exchange gave teachers an opportunity to brainstorm and speculate on different ideas, projects, and programs. This type of dialogue generated a whole reserve of "tricks-of-the-trade" that actually represented an informal database for the teachers to draw on at later dates if necessary.

These examples highlight important instances of professional learning that teachers experienced through their participation in the MDE's programs. Their significance should not be overlooked, as many of my informants truly appreciated and valued these gains. At the same time, the weaknesses in this learning process need to be analyzed.

The weaknesses of the learning process provided by the PT are revealed initially in the differential use of meetings at the schools. One might be tempted to address the variation in meeting format, productivity, and frequency by increasing meeting uniformity through the pursuit of more effective leadership skills for the pedagogic coordinator, more productive meeting management strategies, different NAE facilitators, and so on. But focusing on these mechanical aspects of meetings would miss a central underlying cause of their different expressions at the schools which seemed to be located in the learning process itself.

A careful analysis of this process, which was most heavily centered in teachers' participation in the Interdisciplinary Project's Study of the Reality, the Organization of Knowledge, the Application of Knowledge and in the Continuing Teacher Education Groups, reveals some troubling features. First, an important objective was the collective construction at the school site of an educational project that reflected local realities. The MDE invested tremendous resources into providing many enabling conditions for this constructivist effort, but they overlooked some important and necessary items. For example, personnel policies were not well-aligned with this goal of a locally constructed educational project. Schools still suffered from staff turnovers which had dual ramifications: (1) the loss (transfer) of trained teachers with a history at the school and

in the Interdisciplinary Project and (2) the introduction of new staff who had no role in the school's initial decision to participate in the Project. A personnel policy that required teachers to make a long-term commitment (e.g., 3 years) to a school involved in the Interdisciplinary Project or, more effectively, the decentralization of hiring and firing rights (and therefore the staff building process) to the local school sites might have addressed this destabilizing situation.

Second, the reforms, though pushing through laudable improvements in teachers' workplace conditions, were essentially child-centered. One of their primary objectives was the transformation of students into critical and responsible citizens, yet they did not truly provide a space for **teachers** to consider and construct their own understanding of citizenship, responsible or otherwise.

More importantly, the learning process offered to teachers did not align well with the formal objectives of the policy nor did it match the learning process provided to students; that is, it was not a truly Freireian approach to learning. Two illustrations bear out this point. First, teachers' exploration of their reality focused primarily on their **professional** thematic universe and did not include deliberate or explicit channels for a problematization and transformation of their personal thematic universes, the social context within which their professional thematic universes existed, or the connections between these personal and professional realms.

In addition, within their consideration of their professional thematic universe, teachers' realizations and conclusions about transforming this universe were actually fairly prescribed. The MDE used a morally and politically persuasive argument to establish the

notion that a democratic classroom pedagogy where teachers acted as co-constructors of knowledge with students would be a central product of the reforms. Thus, although teachers' reflections and analysis of their professional universe might have led them to the use of a more authoritarian pedagogy, they were nevertheless being directed toward the use of a democratic pedagogy. In effect, then, for those teachers who had a conception of democracy, citizenship, knowledge and so on that differed from that of the MDE, the PT's reforms were actually fairly authoritarian. That is, the learning process provided by the MDE did not truly meet the teachers where **they** were and guide them through a transformative process. Thus, the MDE did not use a truly Freireian approach with teachers of beginning with a problematization of where the teachers' understanding of their own lives and realities actually were situated and then building on this understanding to enable a formulation of actions necessary to transform limiting relationships in this universe.

In the final analysis, it is important to consider the reform effort launched by the MDE within the context of the time available to them and the profundity of the changes that they attempted. First, both the Interdisciplinary Project and the Teacher Professional Education Groups were time- and energy-consuming endeavors where the intended benefits were primarily of long-term rather than short-term nature. This is because both projects rested on the use of a dialogical process that involved challenging and changing fundamental beliefs; two objectives that require time, patience, and willingness, particularly on the part of the educatees. That classroom practice in some schools

actually did reflect the PT's formal objectives highlights the effectiveness of this process for some of the teachers involved in the reforms.

Similarly, the Project's emphasis on reflection, links between theory and practice, and an orientation toward action and transformation of practice and reality required a personal commitment towards change and intervention into reality on the part of teachers. It takes time and careful crafting to create the conditions necessary for the development of such a commitment, which in the above analysis we saw that the PT fell short of providing for all of the participant teachers. Perhaps under different political conditions and without the restrictive time constraints, the PT would have eventually recognized the importance of aligning the learning process with Freireian principles in order to truly enable the transformation of all teacher participants in the reforms.

Figure 1

Five Priority Areas Of The São Paulo Municipal Department Of Education²⁷

Educator/educatee Relationship

- Overcome the individualism that characterizes student attitudes and behavior
- Create a new understanding that both educator and educatee are subjects in educational action and the construction of knowledge
- Stimulate a relationship based on equality, equity, and mutual respect
- Overcome the banking concept of education where educators deposit information into the minds of educatees who are seen as not knowing anything

Knowledge Production Process

- Develop the understanding that knowledge is not static
- Develop the perception that knowledge comes from relationships that people establish with the world in the hope of intervening in and transforming that world
- Create a new understanding of the plurality of knowledge and the impossibility of having absolute truths
- Discover that knowledge is created not only through reason but also through emotion and affective capacity

Content Areas in Curriculum

- Reconstruct the relationship between content areas and reality
- Identify significant content areas that allow a better explanation and understanding of this reality
- Develop a new understanding that content areas studied in school are not ends in and of themselves but are important as ways of comprehending reality
- Reconstruct the relationship between popular knowledge and knowledge that has been accumulated through time by humans

Understanding Curriculum

- Understand curriculum as the basic instrument that schools can employ to organize their transformative actions
- Conceptualize curriculum as a constructive process that involves the participation of many stakeholders in the school community
- Comprehend that curriculum is dynamic and can be reoriented frequently

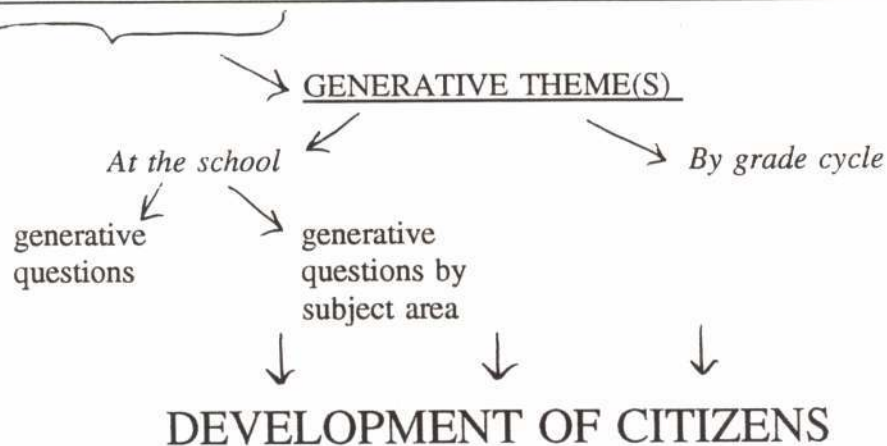
The Role of Schools

- Transform schools into local spaces privileged to receive, consider, and disseminate the culture and knowledge of the community
- Validate schools as centers for participation and organization of the school community in conjunction with other social movements
- Create a new understanding of the political nature of schools and schooling

Figure 2

**The Dialogic Nature of the Pedagogical Moments
in the
Interdisciplinary Project via the Generative Theme**

Study of the Reality	Organization of Knowledge	Application of Knowledge
<ul style="list-style-type: none"> * Problematization * Discussions & stories of the students, educators, & community * Visits * Interviews * Questionnaires * Data + Observations * Significant Situations * Thematic Design 	<ul style="list-style-type: none"> * Selection of Content Areas Reality Systematized Knowledge * Educator's Approach and Attitudes * Cognitive and Affective Requirements * Notions * Concepts * Hypotheses * Presuppositions * Theories 	<ul style="list-style-type: none"> * Implementation of the program that has been organized * Evaluation & Planning for the Transformation of the student, educator, & community * Knowledge: Action, Appropriation, & (Re)construction * Tools: natural & built environments, games, magazines, books, etc...



Dialogics/Contradictions: personal/collective; concrete/abstract; parts/wholes; subjectivity/objectivity; emotions/reason....

Source: Nucleo de Ação Educativa 5, São Paulo Municipal Schools, 1992; Pia L. Wong, 1994.

Figure 3
São Paulo, Brazil: The Interdisciplinary Project via The Generative Theme

Generative Theme: The Evolution of Work and Current Perspectives

Generative Question: Work/employment -- is it an instrument of societal transformation? Does it improve the life of workers?

HISTORY	<ul style="list-style-type: none"> - Evolution of work and the workplace - Power relations: colonizer/colonized and employer/worker - Class struggle - Unions
LANGUAGE ARTS	<ul style="list-style-type: none"> - Communication: different languages - Respect for different languages: valuing different regional¹ cultures - Correct Portuguese as a factor of domination - Understanding: if the individual reads, understands, and analyzes, s/he becomes a questioner of her/his reality and condition
GEOGRAPHY	<ul style="list-style-type: none"> - Distribution of land and land tenure patterns - Migration:² the search for survival - The localization of the individual in space: limits, dominions, regions, frontiers, zones - Inequities in the occupation of geographical space - Becoming aware of the prejudice that causes the disorganization³ of space/land
MATHEMATICS	<ul style="list-style-type: none"> - Rent theory and value theory: the necessity of exercising control over property and its implications - The evolution of the use of numbers - The importance of calculation and math skills in everyday life - Distribution of income: how much is work and labor worth?
SCIENCES	<ul style="list-style-type: none"> - Positive and negative aspects of industrialization: health, environment, technology - Physical evolution of human beings - Control of our bodies and our productivity (How work determines our life and living conditions)
P.E.	<ul style="list-style-type: none"> - The necessity of know about the body and its functions - Is physical activity a human necessity? - Is physical education a way of learning self-discipline?
ART	<ul style="list-style-type: none"> - Art as an agent of transformation - Artistic activities as a means of liberating human beings

Source: Pracinhas da FEB Primary School, 1992; Pia Lindquist Wong, 1994.

¹ Regional differences in Brazil are distinctly characterized by race. Problematizing racism is at the heart of this question.

² Economic development has occurred unevenly in Brazil with some regions enjoying much higher standards of living than others. Internal migration has caused some urban areas to explode.

³ As urban populations explode, squatting and tenement housing have become pervasive.

Figure 4

São Paulo, Brazil: The Interdisciplinary Project via the Generative Theme

Generative Theme: The Evolution of Work and Current Perspectives

Generative Question: Work/employment -- is it an instrument of societal transformation? Does it improve the life of workers?

	STUDY OF THE REALITY	ORGANIZATION OF KNOWLEDGE	APPLICATION OF KNOWLEDGE
Art Education	<ul style="list-style-type: none"> - Visual arts: collages, painting, modeling - Musical activities - Understanding landscapes: natural and built 	Week of modern art activities/ folk music as a means of questioning reality	visual arts/ music/poetry/ dramatizations
History	<ul style="list-style-type: none"> -Questionnaires -Interviews -Debates 	industry/class struggle/living standards/ pollution/ discrimination/ colonization/ human rights	essays/group projects
Language Arts	<ul style="list-style-type: none"> -Posters, billboards, ads -Newspapers 	lectures/ writing projects/linguistic analysis	group projects
Sciences	<ul style="list-style-type: none"> -Debates -Interviews -Group discussions -Reports -Journal articles 	environment/ pollution/basic sanitation/ conservation/ the human body & reproduction/ physical & mental health/ nutrition	group projects/ writing projects addressing a community issue
Math	<ul style="list-style-type: none"> -Questionnaires -Debates 	cost of living/basic computation/ monetary systems/ percentages/ fractions	graphing cost of living, inflation, & income data/ written analyses
Geography	<ul style="list-style-type: none"> -Interviews -Debates -Reports -Maps 	social groups/social classes/ unemployment/ violence/social & physical space	drawing maps/ group projects about urbanization of neighborhood
P.E.	<ul style="list-style-type: none"> -Questionnaires -Interviews -Debates 	body awareness/ leisure time	demonstration of good health habits

Source: Pracinhas da FEB Primary School, 1992; Pia Lindquist Wong, 1994

**Table 1: Selected Organizational Characteristics
at the Seven São Paulo School Sites**

SCHOOLS	1B	1P	1H	1O	1M	1C	1J
Shifts/day	4	4	4	4	3	4	4
Meeting Schedule	M-Th 11a-1p	M-Th 11a-1p	M-Th 1-3p	M-Th 11a-1p	M 1-6p	M-W 1-3p T-Th 7-9p	None
# of Teachers	9	9	15	25	18	10	20
Avg. tenure w/ Project*	3 yrs	3 yrs	2 yrs	1.5 yrs	2 yrs	3 yrs	.5 yrs
# of PC's**	2	2	2	2	1	2	2
PC's years @ school	4 & 2	4 & 4	4 & 2	8	12	23 & 10	3 & 2

Note: * This figure is averaged across all teachers in the school and provides some indication of continuity at the school.

** PC is the abbreviation for pedagogic coordinator.

Source: Pia Lindquist Wong, 1994.

Table 2: Teachers' Responses to Selected Questions about Meetings and Decision-making

[Means of all responses & standard deviation; scale is 1-5, 3=no opinion, 1=strongly disagree, 2=disagree, 4=agree, 5=strongly agree]

Schools:	1H [n=8]	1P [n=7]	1B [n=7]
Selected Questions (I.A.6, I.J.1, IV.A.8)	3.5 (0.866)	4.42 (1.048)	4.85 (0.349)
1. School staff is a part of the decision making process.			
2. In this school, we don't just talk about problems, we resolve them.	3.5 (1.0)	4.42 (0.495)	4.14 (0.99)
3. We work together frequently to develop curriculum or specific activities.	3.87 (1.16)	4.14 (0.99)	4.14 (0.99)

Source: Teachers' Survey conducted at seven São Paulo public schools; Pia Lindquist Wong, 1994.

ENDNOTES

1. Paulo Freire, Pedagogy of the City (New York: Continuum, 1993).
2. In 1989, approximately one million pre-school and primary school age children could not enroll in schools due to limited school capacities (Paulo Freire, Pedagogy of the City (New York: Continuum, 1993) p. 151).
3. On the eve of its departure from office, the Covas administration mandated deliberative school councils with representation from various school constituencies (e.g., students, parents, teachers, etc.) and formal decision-making powers. These councils were disbanded by the subsequent Quadros administration. Under Erundina's administration, these councils became fully operational.
4. The organizational structure of primary schools in São Paulo includes the school director (a mostly administrative position), two pedagogic coordinators (who work directly with teachers), teachers, and support staff (secretaries, cooks, maintenance staff).
5. Linda Darling-Hammond, "Instructional Policy Into Practice: The Power of the Bottom over the Top" in Educational Evaluation and Policy Analysis Volume 12, Number 3, Fall 1990, p. 346.
6. My analysis uses data collected during two field visits (September/October 1991 and August 1991/January 1992) that involved extensive observations, interviews, and teacher surveys in seven São Paulo public schools participating in the Interdisciplinary Project.
7. John Dewey, Democracy and Education (New York: Free Press, 1966).
8. Edgar Z. Friedenberg, Coming of Age in America (New York: Random House, 1963); Paul Goodman, Compulsory Mis-Education (New York: Horizon, 1964).
9. Louis Althusser, "Ideology and Ideological State Apparatuses," in Lenin and Philosophy and Other Essays (New York: Monthly Review Press, 1971), p. 172-86; Samuel Bowles and Herbert Gintis, Schooling in Capitalist America (New York: Basic, 1976).
10. Henry Giroux, Ideology, Culture, and the Process of Schooling (Philadelphia: Temple University Press, 1981); Michael Apple, Ideology and Curriculum (London: Routledge and Kegan Paul, 1979).
11. Martin Carnoy and Henry Levin, Schooling and Work in the Democratic State (Stanford, California: Stanford University Press, 1985).
12. Secretaria Municipal de Educação Cadernos de Formação 01: Um Primeiro Olhar sobre o Projeto. (São Paulo: MSE. May/June 1990).

13. In addition to the PT's relatively short tenure, Paulo Freire also did not retain the position of Secretary of Education for the entire three year period, resigning his position after approximately one and a half years. Though his resignation had symbolic impact, it was the general belief among my MDE informants that a cadre of policy makers remained at the MDE whose commitment and support of the ideas and programs instituted during Freire's tenure was very firm. Freire also acted in a consultant/advisory period until the end of the PT's mandate.

14. This information has been synthesized from Secretaria Municipal de Educação, Construindo a Educação Publica Popular: Caderno 22 Meses, (São Paulo: Secretaria Municipal de Educação, 1990).

15. Paulo Freire, Pedagogy of the City (New York: Continuum, 1993), p. 80

16. Michael Fullan, The New Meaning of Educational Change (New York: Teachers College Press, 1991), p. 31.

17. Secretaria Municipal de Educação Cadernos de Formação: Grupos de Formação. Uma (Re) Visão da Educação do Educador. (São Paulo: Secretaria Municipal de Educação, 1991) p. 9.

18. The Directorate for Technical Orientation coordinated the development of the different educational programs sponsored by the MDE.

19. The São Paulo Municipal School District was divided into 10 regional administrations called Nuclei for Educational Action (NAE). The NAEs played a pivotal role in the development of both the Inter Project and the Continuing Professional Education Groups. NAE staff was centrally involved in developing these programs as participants in a series of working sessions that also involved central administrators, university professors and other specialists. They also had primary responsibility for disseminating information about these projects to the schools and then working as project facilitators with those school sites that chose to participate in the projects. In addition, most NAE staff were former teachers, some of whom took leaves of absence to work in the regional administration, others who continued to teach during late afternoon and evening shifts.

20. Secretaria Municipal de Educação, Professional Development Notebooks No. 3 (São Paulo: Secretaria Municipal de Educação, 1991), pg. 2.

21. Because of space and time considerations, São Paulo public schools run four shifts per day. Most teachers must teach at least two shifts per day (usually in two different schools) to make a decent salary. For many teachers, the extra ten hours of pay provided by the Inter Project allowed them the opportunity to drop their second teaching shift and concentrate all their energies and attention on one peer group and one group of students.

22. Secretaria Municipal de Educação Cadernos de Formação: Grupos de Formação. Uma (Re) visão da Educação do Educador. (São Paulo: Secretaria Municipal de Educação, 1990), pp. 9-11.

23. Schools participated in the Interdisciplinary Project on a voluntary basis. In 1991, ten pilot schools began to develop the Interdisciplinary Project. In 1992 and 1993, Project participation was expanded to include a total of 100 schools, all of whom opted voluntarily to participate.

24. Municipal Secretariat of Education Cadernos de Formação: Grupos de Formação. Uma (Re) visão da Educação do Educador. (São Paulo: MSE, 1990), pp. 9-11.

25. The presenters were determined the week prior to the meeting and they decided on a topic to explore. Some of the professional journals to which the school subscribed usually provided the research materials for the teachers' presentation. During the week, the presenters typically met once or twice on their own to prepare their presentation.

26. The teachers read selections from the following texts: L.S. Vygotsky. A Formação Social da Mente (São Paulo: Martins Fontes, 1988); H. Wallon. A Evolução Psicológica da Criança (Lisboa: Edições 70, 1968); J. Piaget and B. Inhelder. Da Lógica da criança à lógica do adolescente. (São Paulo: Pioneira, 1976) as organized in Secretaria Municipal de Educação, Regimento em Ação Caderno 3 (São Paulo: Secretaria Municipal de Educação, 1992).

27. Secretaria Municipal de Educação Cadernos de Formação: Um Primeiro Olhar Sobre o Projeto. (São Paulo: Secretaria Municipal de Educação, May/June 1990); Pia Lindquist Wong, 1994.