

CURRICULUM REFORM: THE LIMINAL EXPERIENCE OF IN-SERVICE TEACHERS THROUGH *CURRERE*

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Current education reform initiatives replace traditional, teacher-led instruction with student-centred pedagogies (Asghar et al., 2012; Barma, 2011). As noted in the scholarly literature, these reform initiatives involve sweeping structural changes that can only be successfully implemented when there is a sense of genuine collaboration between all stakeholders (Fullan, 2016; Hargreaves, 2019). Successful reform implementation should include extensive in-service teacher training that encourages dialogue between teachers, administration, and school board personnel (Capps & Crawford, 2017; Lotter et al., 2017; Potvin & Dionne, 2007).

In Quebec, Canada, reform curricula emphasize student engagement with complex global problems that require cognitively demanding and creative real-world solutions. These innovative science curricula incorporate sophisticated teaching strategies focusing on inquiry and authentic problem-solving skills (Ministère de l'Éducation du Loisir et du Sport [MELS] 2007). Teachers are urged to incorporate these pedagogies into their classrooms to facilitate students' ability to translate knowledge into action.

Too often, large-scale reforms fail because they focus on developing innovation rather than shifting school culture (Fullan, 2016). The implementation process is fraught with peril. For successful reform implementation, it is imperative that teachers' beliefs and dispositions towards the ideals of reform curricula are addressed (Melville et al., 2012; Ryder & Banner, 2013) and that teacher preparedness is adequately attended to at the school level (Ministère de l'Éducation du Québec [MEQ], 2003). Teachers can find developing reform-based practices challenging, which is why the transition is inevitably characterized as a time of stress and discomfort (Stoll et al., 2006). Thus, teachers must have access to meaningful professional development (PD) activities if there is an expectation that teachers will engage with reform implementation.

SITUATING MYSELF IN THE RESEARCH

I have been a science teacher for 30 years. In 2007, the province of Québec, Canada, released the guidelines for reforming the educational system at the senior high school level. Teachers were encouraged to incorporate pedagogical strategies such as open-ended problems, research, and interdisciplinary projects (MELS, 2007). Delivering these sophisticated reform-based pedagogies required a paradigm shift for in-service teachers.

My reform implementation experiences left me with unresolved questions. I was dissatisfied with my capacity to deliver quality learning opportunities and was baffled by many of my colleagues' overwhelming resistance to the reform. I observed that teachers were bewildered when they realized they lacked the pedagogical knowledge to enact sophisticated reform pedagogies. This experience has informed my understanding of this *liminal space*—a time of transition described as ambiguous and indeterminate (Turner, 1967). In this paper, I envision the liminal space as the gap between traditional professional practices and reform education policies.

This paper explores the barriers that impede reform curriculum implementation by examining in-service teachers' struggles. Teachers' struggles to overcome resistant institutional discourses and the widespread opposition to systemic change were central

to this work. Given the barriers I witnessed, I questioned and challenged the status quo, and I examined issues of educational stagnation. My research questions focus on the institutional barriers to curricular change, specifically, how do teachers navigate the gap between traditional and reform professional practices? This study explores curricula reform implementation amidst strong forces of opposition posed by institutional structures and discourses. Little literature examines teachers' voices about evolving professional practice and developing innovative reform-based pedagogies. This research can inform researchers, educators, school boards, and policymakers of the complex work teachers must undertake if they are to self-author as reform-based practitioners.

THEORETICAL FRAMEWORK

Drawing on Turner (1967), I focus on transitioning from traditional teaching practices to reform-based practices. Turner (1967) described the cultural times of transition as a *betwixt and between* time, an ambiguous and indeterminate space that he referred to as *liminality*—the times in cultural cycles that are necessary harbingers of change. These liminal spaces are characterized by stress, emotional upheaval, opportunity, and growth. As teachers engage with learning and growth processes, they can develop a new identity within their professional community (Meyer & Land, 2005). Exploring the transition, or liminal space, that teachers inhabit as they navigate educational reform requires an examination of the bookends that structurally define the two boundaries of this space—reform-based pedagogies on one end and the actual enactment of these pedagogies on the other. Teachers and their struggles to develop reform-based identities are moving betwixt these dynamic and shifting forces. My objective in this study is to examine educational reform policies to gain insights into the liminal space teachers traverse as they transition from traditional to reform pedagogies.

STUDY SITE, METHODOLOGY AND METHODS

This article draws on a subset of data from a more extensive study that examined how science teachers' praxis shifted through pedagogic work in a professional learning community (PLC). My position in this project was as a study participant and researcher. The dual act of participant/researcher gave me the necessary tools to study and interpret the complex relationships between the social and cultural structures and processes associated with education reform. I have included the voices of Guilia, a novice teacher in her second year of teaching; Liam, a teacher with 26 years of experience; and Vera, who taught for 15 years. Liam and I work at a large public school exceeding 1500 students. Vera teaches at a nearby public school of 1500 students, while Guilia teaches at a small public school with a population of fewer than 300 students. All schools are in bilingual suburban communities.

Teachers had diverse motivations for joining the PLC. They were interested in developing their professional practice, and many were enthusiastic about learning through collaboration with colleagues. The PLC meetings were held at one of the high schools for eight sessions for two to three hours per session. Afternoon meetings occurred on average once per month from October to May. The focus of the PLC meetings was on developing reform-based teaching practices.

Data collection included individual semi-structured interviews, video-recorded PLC meetings, and my reflexive journals. Participants were interviewed twice for 45-60 minutes. The first interviews occurred before the first PLC meeting, and the second interview followed the last PLC meeting. The interviews' focus was to gain an understanding of teachers' professional background, epistemological beliefs,

pedagogical practices, and tensions with reform policies and their enactment. PLC activities, interactions, and informal conversations were video recorded, and portions of the meetings were transcribed.

Transcripts and reflexive journals were organized into data sets (Braun & Clarke, 2006). Items that arose among multiple participants were identified, developed into themes, and compared, defined, integrated, and reduced following constant comparative methods (Corbin & Strauss, 2015). I incorporated an inductive thematic analysis (Braun & Clarke, 2006) to generate a detailed thematic description and interpretation of the data set, identifying themes developed at a semantic level. The themes that emerged from the data corpus included teachers' beliefs regarding reform-based teaching and the implementation barriers teachers overcame as they transitioned to reform-based instruction.

FINDINGS

In my findings, I have drawn on my reflexive journals and the ethnographic data focusing on three participants' voices. My interactions with teachers provided insights into our struggles and challenges in enacting the reform curriculum. As I navigated the in-between period of education reform policies to the actual implementation of these policies, I understood how my reaction to the liminal experience shaped me professionally and personally. Throughout the reform experience, my professional identity was challenged as I struggled in isolation to make sense of the reform curricula. I had to find my voice, to assert agency, since this journey involved difficult personal and professional conflicts. The experience, the passage from old to new pedagogies, has thus been both demanding and rewarding. The paradigm shift is my story, and it is a story that I share with many in-service teachers as they endeavour to implement very new teaching practices.

My self-narrative documents my experiences with reform policy implementation. I have drawn on Pinar's four moments of *currere*, including the *regressive moment* in which a writer examines the past to elicit memory; the *progressive step*, where the writer anticipates possible outcomes of what could be; the *analytical stage* where the author analyzes the past and present; and the *synthetical moment* where the researcher examines the present to understand the field of study and the researcher's presence within the study (Pinar & Grumet, 2014; Strong-Wilson, 2017). Thus, I have documented my journey of understanding the reform curricula by following the tenets of *currere*.

As I examined my experiences with curriculum reform, it seemed that a complex, seemingly unsolvable problem bound me. I was stuck in a quagmire of archaic pedagogy, lacking the skills that could set me free to teach the reform curriculum as envisioned. The intricate problem of reform implementation is like a Gordian knot, an elaborate knot with a hidden end that has a simple solution to its untying (Editors of Encyclopædia Britannica, 2022). Understanding how to untie or cut through the Gordian knot of curriculum reform was partly made possible by exploring my dispositions and beliefs about the curriculum reform process.

LOOKING BACK: EXAMINATION OF THE KNOT THAT IS CURRICULUM REFORM

The first moment of *currere* is eliciting memory by looking back to capture what was (Pinar, 2015). In my effort to understand the complexities of the seemingly unsolvable riddle of the Gordian knot that is curriculum reform, I turned back the clock, remembering the time before the reform was introduced. Then, it seemed that every high school course I taught, every day, month, and year, followed a predictable and

comfortable rhythm. I began teaching in 1989. The teaching landscape at that time seemed to have changed little from when I was a high school student in the 1970s. Then, seemingly out of nowhere, the daily events of teaching—the iterative and predictable structures of lecturing, following a textbook from day one to the end of the school year, procedural labs, testing, the ever-recursive loop—ceased to make sense. Everything came to a screeching halt. What happens then when the ordered structures of one’s professional life implode?

In 2007, educational reform curricula were introduced. The new curricula structures presented innovative teaching methods. Aware of the looming educational changes, I actively sought PD activities that would facilitate my ability to teach the reform curriculum effectively. Over the first five years of the reform implementation, I participated in numerous yearlong PD initiatives and developed an emerging understanding of the complexities of the new curricula. Furthermore, my school board introduced the reform curricula during half and full-day implementation sessions dedicated to helping teachers orient themselves within the new curriculum. I remember one particularly contentious meeting when a school board consultant attempted to describe competency development and evaluation. The room erupted—teachers were hostile, angry, and resistant. I remember feeling bewildered. I did not understand competency, and my head exploded when we were told that evaluation should focus on “the most recent snapshot of the student at that point in their journey throughout the year” (Heather, reflexive journal) rather than on a cumulative average. My memory of the reform implementation was consistent with Vera, an experienced teacher who said that the Ministry of Education “had no resources available. They did not have enough training and preparation for the teachers to start implementing. They kind of just said, well, guess what you’re doing this next year. And I still don’t know.” Vera and the literature noted there was limited monetary and expertise resources for reform implementation (Potvin & Dionne, 2007). Furthermore, the top-down implementation process, from Ministry to the school board to consultants, and finally to teachers, resulted in, as Vera said, mixed, incomplete, and confusing messaging.

However, despite the myriad of compulsory PD sessions, teachers in my jurisdiction were, for the most part, resistant to reform implementation. Fourteen years post-implementation, teacher conversations in our staff room include the hope that the reform will “go away” (Heather, reflexive journal). Additionally, to date, there have been no school board PD opportunities that focused on developing teachers’ pedagogy.

My struggles during the transition period of curriculum reform were exacerbated by the merger of my high school with another high school in the same neighbourhood. The teachers in my high school had made progress with teaching the reform. However, the school we merged with was larger, and they had limited experience teaching the reform. As Liam noted: “The schools merged two years ago. We just didn’t do that [the reform]. We were more traditional.” Following the merger, the teachers in my department followed more traditional teaching practices, leaving me isolated, with aspirations of becoming a reform-based teacher. I plodded along, working to develop my professional practice.

During the two years following the school merger, I felt like my professional identity was constantly attacked. The teachers in my department felt that everyone in the department should follow the same teaching trajectory—teaching the textbook chapter-by-chapter, student evaluations based on a straight average rather than the most recent snapshot. My colleagues told me, clearly and with no ambiguity, that collectively we had to teach the same topics in the same order. All teachers’ evaluation ponderations had to align. Thus, I was told that my practices had to conform to the rest of the

department. I refused. In our jurisdiction, the education act “allows teachers to choose their pedagogical approaches according to the situation, the nature of the learning to be accomplished” (MEQ, 2005, p. 8). Given no choice, the other teachers grudgingly left me alone to pursue my professional vision. Looking back on this time, I can confidently say that this was the most challenging three years of my 30-year teaching career.

Mercifully, the opportunity arose whereby I could initiate and facilitate a PLC. Establishing the PLC, collaborating and working with eight teachers, provided a vehicle for teachers to work and learn within a community of peers. Together, we co-developed our understanding and enactment of reform pedagogies. Experienced, mid-career, and novice teachers worked collaboratively to master these pedagogies in a social learning environment. The PLC participants were tangled up in a messy transition between safe, traditional teaching practices and the reform pedagogies that were new, uncomfortable, and not fully understood. We would not go back, and thus, we struggled to move forward.

The tension many teachers experienced when the reform was introduced is captured in the PLC meeting focused on student competency and competency development. The following excerpt occurred between Vera and me as we shared our reflections about reform implementation:

- Vera: When the reform came about, I went to every workshop, every talk. You name it. I signed up for it, and not one person gave me straight answers. I remember going to a conference about evaluation and assessment. I’m like, “Great. What can you tell me about assessment?” “Oh, well, we don’t know yet.” How are we supposed to implement this program if you can’t tell us how we’re supposed to evaluate and assess? I found the whole thing to be frustrating.
- Heather: I don’t think they’ve ever come back to fill in the gaps in any conversation. So, we got this blank when we learned that they couldn’t answer anything, but they’ve also never revisited it.
- Vera: No, they just backpedalled. For implementation, they had no resources available. They did not have enough training and preparation to start implementing. They kind of just said, well, guess what you’re doing next year? And I still don’t know.

The excerpt above voices teachers’ frustrations, anxieties, and professionalism. Teachers’ perceptions about reform implementation were that the process was a mistake, there was a lack of funding, and overall, resources were limited. However, the PLC provided an opportunity to work with others to untangle and make sense of the teaching practices outlined in the provincial curricula.

Beyond the opportunity to work together as a learning community, the PLC created a structure for teachers to engage in critical conversations about school reform. Together, we examined our shared experiences with reform implementation. Thus, the PLC operated somewhat like slicing through a Gordian Knot. Teachers were confronted with a tangled mess of confused messaging, and the tangle was left knotted and unresolved for more than ten years. The PLC provided a way forward, a relatively simple solution to detangling the message. Together, teachers collectively negotiated a cohesive understanding of reform-based teaching. The “betwixt and between” position (Turner, 1967) that comes with change was mitigated when teachers collectively navigated the space from traditional to reform-based praxis. This journey was characterized by stress, emotional resistance, and opportunity.

LOOKING FORWARD: STRUGGLING TO UNTIE THE KNOT THAT IS CURRICULUM REFORM

Where would I like to be, in the future, as a teacher? In the PLC, we discussed problems with teaching as a profession. Liam asked, “would you undergo surgery with a doctor who is using the surgical techniques of 1960?” Clearly, the answer is no. Why then does it seem so challenging to move the teaching profession forward? What prevents teachers from seeking to enact innovative pedagogies? How do we untie the seemingly unknottable Gordian knot of reforming teachers’ practice?

Critical mass. What is the minimum number of teachers required to effect change? If the teaching landscape is to change, in-service teachers need access to PD that unfolds over extended periods. PD needs to provide teachers with opportunities to experiment with new pedagogies in a supportive environment. Furthermore, PD should provide participants with opportunities to reflect and dialogue. As Bakhtin (1984) wrote, “I cannot manage without another, I cannot become myself without another; I must find myself in another by finding another in myself (in mutual reflection and mutual acceptance)” (p. 287). We can find a route across the quagmire through reflection and working with others, aligning the curriculum policies with our professional practices. Furthermore, working in a diverse community of practitioners gave novice teachers the time to reflect, plan and work with experienced teachers. They needed supportive structures to experiment with innovative teaching methods learned at university, moving beyond the status quo of safe, traditional teaching practices.

Following Pinar’s (2015) suggestion, I have looked forward and thought of the work needed to move the reform educational experience forward. Untangling the messy realities of reform implementation calls on the various stakeholders—universities, school boards, and schools—to adequately develop the primary actors in this drama. Teachers. Be they experienced, novice or pre-service teachers, PD is essential if the broader educational community is to resolve the reform implementation problem.

ANALYSIS OF THE PLC EXPERIENCE: HOW TO CUT THROUGH THE GORDIAN KNOT

I feel deep frustration as I recall the novice teachers’ narratives about the induction experience. How to end the cycle of novice teachers struggling in isolation? The literature suggests that new teachers leave the profession partly because they are “generally woefully unprepared” to deal with issues related to classroom management, unmotivated students, and a general absence of supportive structures (Karsenti, 2015, para. 3). In Karsenti’s (2015) study, it was evident that novice teachers needed support. Furthermore, they were not receiving the support that was undoubtedly required. That novice teachers remain in the teaching profession because of individual effort, long hours, grit, and determination in the face of difficulties is a testament to their commitment to teaching. However, their stress and sense of isolation speak to systemic failures (Cochran-Smith et al., 2016). During their induction years, more attention should be given to novice teachers to promote their professional integration into the teaching profession.

Working in a PLC provided the necessary support for five novice teachers. All participating teachers, but most significantly the novice teachers, developed their professional repertoires while reducing the sense of isolation that is an everyday reality for many classroom teachers (Hord, 2008). Guilia summarized this experience in her third reflexive memo: “Being able to converse with other adults is refreshing!” Guilia’s observation is consistent with Lave and Wenger (1991), who assert that learning is a culturally mediated, inherently social experience. The PLC allowed participants to engage with a curriculum focused on developing abilities to enact the reform curricula.

My second response to where I find myself now is my feeling of regeneration. I found that collegial support helped cut through the tangle associated with a school merger, working in isolation and the predominantly traditional vision of teaching at my school. As I examined my past and present experiences with reform implementation, I appreciated the emancipatory power of a collaborative PD model. Together, my colleagues and I were able to create a space open to experimentation as we supported each other in realizing our professional vision. The fabric of institutional life (Pinar, 2015) became more satisfying because of the PLC experience. The PLC participants are no longer struggling, feeling oppressed, and isolated.

Drawing on Bourdieu (1984), the beliefs of a social group can exclude an individual from participation in social spaces if their “sense of one’s place” (Bourdieu, 1984, p. 471) does not adhere to the established laws or norms of the social world at play. As I rejected the models of teaching that my community endorsed, my subsequent exclusion from the teaching community was not surprising. My refusal to accept the school norms left me alone and isolated. I struggled to navigate the dominant discourses of my department. I became more conscious of the nuanced portions of the reform curricula that celebrated teachers’ right to use their professional judgement to provide a learning environment informed by high-quality teaching.

At the outset of this liminal experience, I was overwhelmed, caught between what I hoped to accomplish professionally and what the dominant school discourses would permit. The collective goal of my department was to maintain the status quo at all costs. However, my professional vision focused on implementing the reform. The liminal experience, the struggle for professional growth, allowed me to transform my professional practices as I incorporated new teaching models into my daily routines. Working together in a community created an interdependence that generated a unified voice where collectively, we had the strength to assert our professional identities that integrated elements of a reform-based praxis.

Pinar (2015) asks, “How is the future present in the past, the past in the future, and the present in both” (p. 78)? In the present, in the here and now, I find myself wandering as I negotiate this liminal space. I can see the goal post, but the goal post is sometimes shrouded in a mist. Seeing the future through the mist and the fog means finding the courage to claim what is possible. Working with teachers to traverse the liminal space between policy and practice could make this possible.

SYNTHESIS: THE GORDIAN KNOT UNTANGLED

How has the PLC experience transformed my identity? I have begun to conceptualize a path moving beyond the miasma of departmental roadblocks, crossing the liminal space, mooring safely on the other side. When I initiated this study, I began with my preoccupation with the reform curriculum and its associated practice. Wanting more professionally meant that I had to relearn how to teach. How was I to do this? In an optimistic moment, I thought that perhaps other teachers were similarly positioned—asking questions and wanting more. Thus, the PLC journey began. Beginning small, with baby steps, together, we developed our professional practice. We studied, laughed, and wrung our hands, sharing our emerging reform-based pedagogies.

The PLC experience seemed like a small thing—16 hours, eight working sessions. However, the PLC work made an immeasurable difference to the novice teachers. They completed the year feeling validated and optimistic. In our first meeting, they spoke of fear, stress, and exhaustion. The feelings of isolation were replaced with supportive friendships that show signs of enduring. The sense of trust and camaraderie created a space where the nine teachers could learn and enact reform-based pedagogies in their

professional repertoires with the aim of improving student engagement and achievement. This study explored the teachers' collective journeys of collaborative learning and teaching.

FINAL REFLECTIONS

As the year-long PLC played out, I mused over what was gained. Personally, of course, I developed confidence as a reform teacher. Equally important was the opportunity to work, learn, and develop professionally with like-minded colleagues. The lessons shared, the skills gained, and the laughter furnished a panacea that helped me re-establish and elevate my professional identity. My professional practices continue to flourish because the culture of friendship and support was an intrinsic aspect of the PLC. On another level, this self-study has provided insights into acts of resistance. Working within a PLC gave me the courage to slip beyond institutional pressures to conform. I have found my voice, and I am confident and certain that my professional vision has value. I believe the time will come when reform-based pedagogies will be commonplace in more classrooms.

On a personal note, working and learning in the PLC was a transformational experience. My professional practices developed, as did the practices of the eight participants. The journey to develop reform-based pedagogies was, in many ways, a rite of passage. The eight teachers and I had to critically examine our professional practices. First, we deconstructed our pre-reform practice, acknowledging that maintaining safe traditional pedagogies was tantamount to remaining stuck in a quagmire. As we laboured to develop new teaching methods, we began the work of untangling the Gordian knot of curriculum reform.

The process of enacting reform practices involved struggle, confusion, and disorientation. During this liminal time, the PLC teachers explored the puzzle of the Gordian knot. Positioned between pre-reform and reform professional praxis, our task became one of collectively resolving the tangle created by the misalignment of the QEP curriculum policies and our daily practice. Through our joint pedagogic work, we, the nine science teachers in this study, simultaneously transformed our practice as we were transformed by untangling the curricular knot. The journey to find release from the quagmire was hard work, characterized by frustration and, at times, a sense of being adrift, alone in a liminal space. The act of breaking free and solving the riddle of the Gordian knot provided teachers with the necessary foundation to reconstruct their vision of teaching the QEP as reform-based practitioners.

Today, the PLC members are no longer pre-reform teachers. The novice teachers leveraged the necessary support that gave them confidence to continue the work that began during their pre-service experiences at university. In contrast, the experienced teachers are evolving into reform-based practitioners. Today, four of the PLC participants continue to develop reform-based pedagogies as they work on another reform-based PLC project. Three participants are doing graduate work, and one participant continues to experiment and discuss his progress outside the PLC experience. My journey to elevate my practice continues in my roles as teacher educator, researcher, and high school teacher.

Like untying a Gordian knot, curriculum reform is a complex process. At the crux of the problem is teachers' need for high-quality PD. Reform implementation involves a change in classroom practices, which requires that teachers have the necessary support to develop new ways of teaching. Breaking down institutional barriers to empower teachers on this liminal journey is essential. Disrupting the status quo is an intricate task,

a tangle that needs to be untied. In this study, the solution was not unduly complicated, and the knot was neatly sliced as teachers engaged in a community of practice.

Teachers need support and access to high-quality PD opportunities that improve their knowledge, skills, and attitudes, leading to observable and measurable pedagogical improvements to elevate student learning (Thompson & Goe, 2009). PD that incorporated practical teaching tools and content knowledge aligned with the reform curriculum could have promoted a lasting change in teacher practice. Government documents clearly articulated what reform implementation would require—energy, expertise, and determination (MEQ, 2001). Although there was a broad understanding that in-service teacher training was a fundamental requirement for successful reform implementation, this prerequisite was sadly neglected since the funding and expertise failed to materialize, inevitably hampering teacher preparedness (Henchey, 1999; Potvin & Dionne, 2007). PD opportunities were scarce as budget constraints, and “a genuine culture of implementation did not seem to exist” (Potvin & Dionne, 2007, p. 394). Thus, teachers were unprepared and insufficiently informed to implement the reform curricula (MEQ, 2003; Potvin & Dionne, 2007). Although we are now fourteen years post-implementation, many in-service teachers in my jurisdiction have not had access to meaningful PD that focuses on reform pedagogies.

Effective teacher learning can improve teacher practice. This research studied how teachers engage, learn, and enact useful and practical structures and processes that facilitate exemplary teaching practices. Accordingly, this research will benefit researchers, educators, policymakers, and school boards on implementation barriers to curriculum reform. The literature indicates that, after two decades of educational scholarship and policy efforts, teacher practices continue to rely on traditional teacher-centred pedagogies in the classroom (Fullan, 2016; Hargreaves, 2019). This study examined the challenges faced by teachers as they work to develop reform-based pedagogies.

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