University of Alberta

(MIS)CALCULATING PROFESSIONAL DEVELOPMENT FOR MATHEMATICS
TEACHERS: A PSYCHOANALYTIC PERSPECTIVE

by

Mary-Lee Judah ©

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Dedication

To my mom, Marjorie

and for Bene

ABSTRACT

How can a psychoanalytical framework, brought into action research to approach teacher professional development, provide teachers with an opportunity to become other than strangers to their own desires? By bringing together a group of Alberta teachers to investigate questions regarding how a Lacanian framework assists us to expose the ironies and contradictions created by three major influences on teachers' professional lives: an ambitious new mathematics curriculum, the inclusion of technology related outcomes into mathematics, and the requirement of completion of Teacher Professional Growth Plans, I map out possibilities for teachers to come to a better understanding of the forces that pull or repel them to comply with the demands of teaching.

From the initial question of: In what ways do recent teacher supervision policy and curriculum reforms in Alberta support the stated goals of promoting professional growth and critical reflection for teachers?, two key questions arose as the research progressed: Where does *jouissance* lie for the teachers involved in this study? What are the master signifiers that come into play as the teachers attempt to incorporate government initiated change into their teaching practice?

Lacan's notions of psychoanalysis act as a pivotal framework within which his three psychic registries, the Real, the Symbolic, and the Imaginary act as a unified but malleable force whereby teachers live their lives. Particularly, Lacan's theoretical model of the four discourses allows us to explore professional development and teachers acquire and internalize or reject curriculum change and curriculum documents, their beliefs, and theirs values.

ACKNOWLEDGEMENTS

A teacher if indeed wise does not bid you enter the house of wisdom,
but rather leads you to the threshold of your own mind.

Khalil Gibran

As I reach the conclusion of this adventure known as graduate school, I have paused several times to reflect back to the people and events that have transpired during this six year journey. The people that have inspired and encouraged me are many and I cannot fully state the emotions that I have for these special individuals with only a few simple words. How can I thank all those who helped me reach this momentous point in her life? The words "thank you" are but empty signifiers of all that I am feeling at this very moment. Until the time that I find a way to express all that I feel please accept this substitute.

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*It's trite to say that your life divides up into before and after, and
you don't have trouble placing things in time anymore. You can
almost date them, something like B.C. and A.D.*

Hyde (1999, p. 180)

CHAPTER 1
THE ROOTS OF OUR CONCERNS

Across North America, growing calls for public accountability (Apple, 1993,

1998) are challenging teachers' professional autonomy. As a part of this wider

environment of accountability, Canadian teachers themselves are currently subjected to

increased scrutiny and calls for competency assessment (Martin, 1999). Given Alberta

Education's continued reliance on modernist notions embracing a culture of surveillance

and control that surround teaching, some scholars (Martin, 1999; Couture, 1999) raise

serious doubts about whether teachers will be successful in maintaining their professional

independence to make professional decisions in the best interest of students. It is the

clash between the modernist mechanisms of surveillance and teachers' resistance against

these efforts that attempt to undermine their profession identities. Alberta teachers

recognise that mechanisms of control are not located in one specific place: they are

dispersed throughout the school system (i.e. through high stakes testing, monitoring of

teachers' practice by administrators and parent perceptions of their child's achievement).

Fenwick (2001) has explored the multiple tensions that governed the introduction and

administration of Teacher Professional Growth Plans (TPGP) [1]. As Fenwick describes,

TPGPs were introduced as a political compromise that satisfied an emerging appetite for

great accountability on the part of teachers. The calls by the neo-conservative

governments of Ontario and Alberta set the stage for re-representing what is meant by an

acceptable form of teacher accountability.

This dissertation maps out paradoxes of dominant forms of representation that

characterise current pedagogical, mathematical, technological and professional

development discourses that shape the identities of teachers in Alberta. In order to

accomplish this goal, I take up Phelan's (1996) notion of "control" hidden within the

guise of liberating professional development initiatives on the part of the Alberta

government to illustrate how three major changes (mathematics curriculum changes,

technology integration program of studies, and a professional development policy) situate

the teacher as an object that can be housed under the cover of the terms *professional

growth* and *autonomy*. Drawing on the work of Jacques Lacan, I use a psychoanalytic

cultural critique to open a space to interrogate and build possibilities for Alberta teachers

to investigate change and ascertain how these changes will affect their willingness to

embrace change. Under this model, teachers are able to reflect upon how they situate

their own identities relative to the three areas of curriculum change. This dissertation

takes up the forms of representation embedded in these three areas of change and how the

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[1] In Alberta, when the provincial government proposed term certification in 1997, the Alberta Teachers' Association was successful in developing an alternative called the *Teacher Professional Growth and Evaluation Policy* (1998). Under this policy, cyclical evaluation was replaced with a requirement that teachers would develop annual professional growth plans identifying key ways in which they would improve their teaching practice. These plans were then to be submitted for review by the school principal. By the fall of 1999, the province's 30,000 teachers were required to develop individual professional growth plans.

various forms of representation undermine the very goals of the TPGPs to promote individualization and teacher autonomy.

The key question for this research is: In what ways do recent teacher supervision policy and curriculum reforms in Alberta support the stated goals of promoting professional growth and critical reflection for teachers? Specifically, my research focuses on how mathematics teachers have situated themselves in light of current teacher supervision policies and curriculum restructuring, including technology integration, in the past five years. I argue that the professional development literature needs to incorporate a psychoanalytical cultural critique that formulates strategies that enable teachers to work through and enhance their pedagogical practices and identities. This is not to suggest that all teachers must become specialists in psychoanalysis; but rather, that curriculum writers need to take into consideration the underlying discourses circulating throughout the documents and how language can and is interpreted by teachers.

How can a psychoanalytical framework, brought into action research to approach teacher professional development, provide teachers with an opportunity to become other than strangers to their own desires? The response to this question is explored through a series of related sub-issues: How do teachers' lived experiences affect their willingness to embrace curriculum change? How do teachers grow professionally in different teaching environments? What are teachers' orientations and attitudes towards learning that influence the use of technology in the mathematics classroom? How are mathematics teachers' identities altered with the changes that have been placed upon them? How do mathematics teachers incorporate change into their teaching practice? How can professional development for mathematics teachers be fostered? The above questions

allow for further investigation leading us to the root of professional development, which is to familiarise teachers with different ways to enhance student learning within a given number of teaching contexts, while using various curriculum philosophies; they are related to what teachers view as the intent of professional development.

The Research Question: Early Arrivals

Upon completion of my Master's thesis, in which I investigated the ability of a computer-based project to influence students' attitudes towards mathematics, I felt the need to understand how teachers' use of technology is changed when working in a collaborative setting with a colleague. Overall, the research undertaken was focused on technical implementation questions with very specific outcomes and questions regarding student activities. What occurred during the course of the research was a change in the teacher's attitude rather than the students he taught. The changes in the teacher's attitude towards technology led me to reframe the project and consider the data collected from this one particular teacher in a personal action research context. In research, one commences their research with a clear idea as to procedures to follow and how the data will be organised and analysed. Such was the case regarding the original intent of the research undertaken during my Master's thesis. However, the results left me with a need to further my investigation beyond the original limitations. Understanding "action research as living practice" (see Carson and Sumara, 1997), I returned to my original observations and investigated them through that lens. That strategy allowed me to investigate many complexities closed off by my initial commitment to use a hybrid of quantitative and qualitative research.

Through my course work at the doctoral level, my work as a classroom teacher,

and my work with the Alberta Teachers' Association, I became increasingly interested in

the professional lives of teachers. I have been involved for the past ten years as an

Association Instructor[2] (AI) for the Alberta Teachers' Association. During my tenure, I

have had many occasions to talk to other AIs regarding their views toward professional

development as well as the views held with whom they work. One AI told me that he had

encountered a great deal of resentment on the part of some teachers he worked with and

that one principal in particular openly commented about the release time he needed in

order to carry out his assigned duties.[3] I asked him to describe the situation he

experienced.

> When I first became an Association Instructor, the principal of the
> school was very supportive; he thought that it was very important
> for his staff to be involved with leadership type activities and he
> considered my work with the Association just that. One day I was
> scheduled to drive to Medicine Hat after school. It started to snow
> just before the noon hour. The principal arrived at my door shortly
> after classes began in the afternoon and he told me that he would
> cover my classes for the afternoon so that I could get most of the
> way to Medicine Hat before it was dark.
>
> A few years later, I transferred to another school. Every time that I
> was away, the principal of my new school would come up to me and
> shake my hand; I laughed it off in the beginning just thinking that
> that was his way. He then started reintroducing himself to me or
> welcoming me back from my holiday every time that I was away
> and he would ask me what my name was. I found this very
> demeaning. Finally, one day I said to him, "If you think that being
> an Association Instructor is so great and has so many perks, then
> you should apply to become one. It doesn't involve too much, only
> fall and spring meetings on weekends and a week of training during

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[2] The Association Instructors consists of a corps of 45 teachers who reside throughout the province of Alberta, under the governance of the Alberta Teachers' Association. Instructors present workshops to teachers throughout the school year and attend regular training sessions. Instructors are trained to present up to thirty-five workshops ranging from global education to discipline and teacher professional growth plans.

[3] Typically, Association Instructors are asked to present ten workshops per year.

summer holidays. The planning for workshops isn't that much, it only takes about three hours to plan one hour of presentation time and most workshops are only five hours long. You only have to do about ten a year. You also get to drive everywhere after you teach all day long to present the workshop and then drive back after presenting all day. If the workshop is under two hours away, you cannot have expenses paid for if you decide to go the night before".

I now work for a new school board. Because there is a change in principals every two to three years, the principal has little to no impact on shaping or changing the culture of the school. Now, it is the staff that is relentless; they have told me, jokingly, that I am the principal's "golden boy" or "the chosen one". Like my former principal, they have no clue what I do. They think that I get paid this huge salary for giving workshops.

You know though, it's not just the AI stuff. I am the social studies department head and I am away a lot for meetings for that too. We are starting into the cycle of curriculum change and I am away for meeting to review the new curriculum and am involved with writing questions for the test bank for Alberta Learning.

I am also juggling a Master's and am trying to get some of my work out there. That takes time too…more release time that I get from the school…at the cost of $1/200^{th}$, to me, per day rather than getting paid to go away and present at things like ASCD. They think that I am double dipping when I take my personal leave to go somewhere to do anything. The principal really tries to support me and that really pisses off the staff.

The above conversation brings to the forefront the complexity of professional development. What is professional development? What makes professional development most meaningful? This conversation underscores my belief that professional development cannot be considered one activity undertaken by one single teacher at one point in time. It is complex, wrought by internal and external expectations, and impacts teachers differently at any given point of a teacher's career. Only one constant remains; eventually some change will occur. The changes will, however, be individualistic and may be positive or negative.

Just as teachers cannot remove themselves from their daily working context or from their past and present experiences when dealing with professional development, neither can I, as a researcher, remove the external and internal forces and experiences I have lived while conducting this research. Teachers do not experience professional development in a vacuum; to attempt to do so would require that all extraneous influences be eliminated. To fully grasp the complexity of the lived experience of professional development and growth it is imperative that I make the conscious decision to not attempt to erase the influences that impact a teachers' everyday working environment. In the case of this research, these influences include grappling with a new mathematics curriculum, a technology integration program of studies, a TPGP initiative, and the effects of an almost province wide teacher strike.

The Mathematics Curriculum in Alberta: Adding it Up

Because of the constant changes teachers must integrate into their teaching practice, many issues, some controversial in nature, arise. Curriculum changes for mathematics are to be completed by the end of 2006 while the other core subjects of science, English, and social studies are in the processes of implementing curriculum that is due to be completed by the end of 2010 (Alberta Learning, 2002). One of the major trends in education in Alberta that has effected all core courses is the creation of a new program of studies entitled *Information and Communication Technology Program of Studies* (2000a) (ICT). The ICT program of studies was intended to be fully implemented in September 2003. The purpose of the ICT program of studies was to integrate technology as "a curriculum within a curriculum" (Alberta Learning, 1998a) that is, to

have technology seamlessly used as a tool within existing curricular frameworks. "The ICT curriculum is not intended to stand alone, but rather to be infused within core courses and programs" (Alberta Learning, 2002).

Throughout the past decade, I have noticed a change in teachers' conversations about professional development as new curricula was introduced. During this time, my work with a professor conducting interviews with teachers involved with a technology mentorship program illustrated that teachers are taking more responsibility for their own professional development. But I sensed some resentment from the participants and began to question how this resentment, in turn, affects the teachers' sense of identity. I began to wonder how teachers could use the TPGPs to assist in opening spaces where professional development might occur? I recognised that if I could explore this question, I would be able to better understand teacher identity in the face of change. In order to answer this question, my research investigated what teachers do as part of their professional development commitments and how these actions influence the way they teach.

Since their inception in 1997, TPGPs have made a dramatic impact on the professional lives of Alberta's teachers and have raised serious challenges for their professional development. Variations of the Alberta model are used by other provinces such as New Brunswick and Nova Scotia (Fenwick, 2001) to assist educational stakeholders in bridging the gap between teacher competency and accountability. In Alberta, TPGPs are mandated under the provincial *Ministerial Order #016/97* (Alberta Learning, 1997) with the purpose of directing teachers to demonstrate and carry out their duties with the best educational interests of their students in mind. Goals set forth in individual teachers' TPGPs must adhere to teachers' roles and responsibilities in that

teachers must create an environment which supports optimum student learning. TPGPs are designed to enhance learning and professional development as a career-long process. Teacher are required to develop and implement annually a growth plan to achieve the professional learning objectives or goals they deem as necessary to enable them to fulfill their teaching responsibilities. The goals set forth in the TPGPs must be consistent with the *Teaching Quality Standard* (Alberta Education, 1996a).[4] In this way TPGPs are to be used as a "reflective mirror", as I was told in an Alberta Teachers' Association Instructors' training session, where teachers examine what they believe to be their shortcomings as practitioners.

Using a Lacanian psychoanalytic frame of analysis, this dissertation investigates the many ways in which teachers view themselves through that "reflective mirror" as well as how their perceptions of themselves, curriculum change, and professional development allow or create resistance to using TPGPs as a tool through which professional development is accessed. For me, it is important to view the entire teaching context as an integral part of teachers' identity and I have included the teachers' working contexts as part of this research. Teachers' lives are complex and this dissertation attempts to reflect that as well as the ambiguities within which they live. TPGPs provide the occasion, or space, for teachers to investigate ways in which they can embark upon

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[4] The *Teaching* Quality *Standard* identifies the knowledge, skills and attributes (KSAs) expected of both graduates and practicing teacher. Universities offering Bachelors of Education degrees were required to provide instruction ensuring that their graduates possess competencies in the identified KSAs in order for the prospective teachers to be issued an interim teacher's certificate. Furthermore, graduates from Faculties of Education would need to attest they have acquired the necessary KSAs needed to teach in Alberta schools. In 2005, the intense focus of Faculties of Education in Alberta was to explain how they are integrating the KSAs into teacher preparation programs. These discussions, framed around "Teacher Efficacy Studies" conducted by the departments, at times, challenge the universities' autonomy and independence (Communication with ATA staff member, July 24, 2005).

investigating how they can engage in professional development that is meaningful to the individual teacher.

Arriving at the Research Question

To better understand teachers' points of view towards TPGPs, I conducted a pilot project; interviews arising from the project formed one source of the data used in this dissertation. The other source of data comes from a journal I had been keeping over my four years as an AI presenting TPGP workshops. The journal contains my observations as well as informal notes about my sense of people's impressions regarding TPGPs. It is through the process of interviewing that teachers' stories and how they think about their lives (Bogdan and Biklen, 1992) began to emerge in relation to their experience. According to Fontana and Frey (1994), the role of the interviews allows the researcher to view "the subjects" as "human beings" with agency and the capacity to shape their environments and existential realities.

Five interview questions were sent to five teachers before the pilot project interviews were conducted so that they could formulate answers if they chose to do so. The interviews were performed on a one-on-one basis with interviews lasting one hour each. The interview questions were as follows: 1. How would you describe the impact TPGPs have had on your teaching practice, your professional development, your colleagues, and your school's climate? 2. Consider your first year of teaching. Had the growth plans been in place then, do you think that they would have made a difference to the way your teaching career unfolded? 3. How would you describe the degree of success you and your colleagues are having in implementing the new mathematics curriculum

and the *Information and Communication Technology, K -12: A Program of Studies*? 4.

How critical a role are growth plans in supporting professional development related to the

new mathematics program and the *Information and Communication Technology, K -12:*

A Program of Studies? 5. TPGPs are meant to be a tool to assist teachers in their

professional lives in schools. Teaching is sometimes compared to cooking a fine meal:

using just the right ingredients in a nuanced and subtle way. Extending this analogy

further, consider this question: If teaching were thought of as cooking, what object in the

kitchen would be a metaphor for TPGPs and why?[5]

Because the questions asked in the pilot project were so broad, a number of issues

arose. First, the teachers involved in the research had not completely formulated what it

was that they were to include in their TPGPs, nor what should be taught or excluded

given the resources available. For one teacher in the research group, Monique, the TPGPs

should include, and I quote, "a professional growth plan, you know what are you going to

do with your own professional development. What are you going to do curricular wise, at

the more specific domain and then from that it should be more what is one of your

personal goals".

Monique was unclear as to how the professional growth plans could help her

implement a new curriculum. She commented:

> Right now, I am hoping that I am on time, I'm hoping that I can
> finish the course, I'm hoping that I am teaching to the level that I am
> supposed to be teaching. I have a curriculum guide, I have a
> textbook, and I have my interpretation. Somewhere in there lies

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[5] The metaphors question was used as a means of finding what locations teachers are *in*-habiting. Drawing from the work of Irwin (2000) reality is constructed in metaphor (p. 142). It is through this construction in a fictional realm where we are able to see ourselves as unified and coherent selves. What I have seen through my work, as an Association Instructor, is that everyone has a different metaphor – what prompts this varied vision is the master signifiers that are at work for the individual. What is an ideal TPGP for one teacher may not be the same as another person's.

what needs to be done and the first time you do anything, you're never really sure. I know that the TPGPs are not putting the curriculum change into any sort of perspective for me.

Another teacher, Lori, described her experiences with the TPGPs quite differently than Monique. Lori indicated, "The TPGP helped me pick a focus area and it has helped me find areas that I am strong in or that I have strengths in. It also has helped me to recognise where it is that I need to grow". She believed that TPGPs allowed more flexibility than other school board initiatives, "The role that I see for the new Teacher Professional Growth Plans is more of a three year thing, I guess that I am looking at it as more of a two to three year thing and I don't really look at it too much curriculum wise, I look at it more growth wise as a professional".

Another participant, Shelly, had no experience working with the TPGPs but used the productivity plans that she had written as the basis for her answers. Shelly's uncertainty of the TPGPs was reflected in her reflection as to what should be incorporated into a TPGP:

> I haven't done one yet even though I am supposed to. I think that a Teacher Professional Growth Plan should be like the productivity plans. The need to specify exactly what it is that you are going to do and how you are going to do it. It scared the bejesus out of me because when I put it down in writing, then it made me feel is if I had to get it done. It makes it more real for me. It's been a target, always in my head, but to write it down on paper and to actually share it with someone else makes it much more real.

The Road Taken

Each teacher involved with the pilot study had different experiences and expectations as to the perceived value of the TPGPs. Fist, the teachers placed themselves along both ends of a continuum regarding their views of TPGPs as being something that

enhanced their teaching practice versus having little to no impact on their teaching practice.

Second, teachers saw the new mathematics curriculum as problematic insofar as its implementation and as well as how technology could be quilted into the subject area. Monique incorporated technology into her mathematics program as it is a mandatory component of the mathematics curriculum. She admitted that:

> this whole technology thing has been a very steep learning curve for all of the people in math and I think that we have really taken on this you know we use calculators all of the time but we really don't have access to computers so they certainly aren't a primary thing in this school. I guess that it all depends on how much money you have, that is the bottom-line.

Monique expressed concern as to how the new technology program of studies would be perceived by her colleagues. She expressed apprehension that technology integration would fall, "into the lap of math teachers. Other teachers think that it doesn't fit with their curriculum".

Lori expressed frustration with the new mathematics program in that there is no one clear-cut method of delivery.

> When we got that new curriculum I looked through it and I tried to teach a lot of the strategies that they suggested. I thought, "I can't do this". So, personally, I look at the concept and I think, "What do they [the students] need to know?" Then I implement my own strategies which is pretty much what they are asking. I don't use their step-by-step suggestions in that textbooks because it's really hard.

She added, "I think that the teachers don't know the curriculum. I think that they rely on the resources as being the curriculum versus knowing the curriculum". Lori viewed resources as one of the biggest stumbling blocks towards implementation. She believed that many teachers, "opened their teaching resources at page one and finished with page

120, for example". Teachers, for Lori, are not familiar with the curriculum and do not make the necessary connections between what they are mandated to teach and the resources with which they teach. In many instances, Lori believed that teachers "over-taught" or taught beyond the curriculum much as one would expect the hysteric to respond: the subject continually looking for *jouissance* in the other.

Lori viewed the integration of technology as an issue to be considered in her following year's TPGP. With a change in grade levels at the end of the school year that this project was completed, Lori did not want to overload herself as she felt that, "spending time getting to know the mathematics curriculum was a priority". She continued, "I will look at it next year when the implementation date is a little closer. I just don't know how I will use computers, there are so few in the school".

Shelly believed that the new mathematics program has recently become more successful.[6] She explained that, "Some of the things weren't made clear enough. Now that Alberta Learning has gone through and made things clearer, teachers are having more success in teaching the program".

Shelly did not believe that mathematics teachers should be concerned with implementing the technology program of studies into their classes beyond calculator use and, thus, including technology as a goal in her TPGP was warranted. She stated:

> The technology program of studies is for all teachers to implement.
> It should not fall just on the shoulders of math teachers. If we do the
> graphing calculator work, other teachers should be responsible for
> the rest; we need to know how to use the calculators, but putting
> spreadsheets and databases as part of your TPGPs is taking this
> whole technology thing too far.

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[6] It is important to note that other reports from previous research work I have done indicate that teachers do not feel as though the new program is successful.

The teachers all had diverse views of what should and should not be included in their TPGPs. They agreed somewhat as to the success of the implementation of the new mathematics curriculum and to the degree to which they had incorporated technology into the new mathematics program.

Third, the teachers had different opinions as to their vision of the TPGP within the context of the kitchen object metaphor. I argue that teachers are not yet familiar with the language involved in the aforementioned documents as master signifiers cannot be buttoned down, therefore, meaning cannot be buttoned down. The implications of the varied meanings teachers are creating may be devastating to the TPGP initiative. This study only dealt with teachers' views, but what of those held by their administrators? How do the TPGPs play out where principals are ambivalent about professional development, against professional development, or see the TPGPs as a means of evaluating teachers?

The teachers were not sure as to how to interpret the various documents that they work with. Teachers need sub-skills in order to meet the knowledge, skills, and attributes (KSAs) outlined in the *Teacher Quality Standard*. A teacher who attended a workshop that I presented e-mailed me this fall. She indicated that she had a dilemma as the principal of her school rejected her TPGP because she had wanted to take a web design course. Her principal informed her that, "Because the school does not have proper equipment, you cannot take this course. You will have nowhere to practice and you'll forget everything that you learn by next year when we purchase the equipment". This e-mail underscores the need for all involved to set priorities and work towards them.

Monique described the impact of the TPGPs on her investment in them as negligible. For her, "it would make no difference whether or not I have to do a TPGP. I would do professional development anyway. It is part of my job and I cannot do my job without understanding what it is that I have to teach". Lori agreed with Monique in that she would, "do professional development with or without being mandated to do so. It's inherent. I mean, you would do it, you just don't have it down on paper". Shelly expressed the same sentiments as Monique and Lori. She stated, "Professional development is something that I have always done. I did it long before we had to write it down and was made to be accountable for it".

All teachers viewed themselves as dedicated professional teachers. They believed that for them the TPGPs would not change how they developed as teachers. Monique commented, "I see professional development as a very personal kind of thing and whether I had to write this down or not, wouldn't really matter to me. Maybe it would to other people but I know that I would have done whatever I was going to do anyhow". Lori believed that, although the TPGPs did not change how she approached professional development, that, "it would keep other teachers focused and also that they would be accountable as well". Shelly stated

> I don't think that if I would have had to do a TPGP that it would
> have had a lot of impact on what I did because I would have done
> PD anyway. For some teachers it might make a difference, but not
> for me.

All teachers interviewed agreed that the TPGPs made no difference to the way that they would teach or to the way that they would conduct their professional development. All teachers interviewed averred that perhaps the TPGPs might make a difference for teachers who were not making curriculum change or professional

development as their professional responsibility. Is it the teachers' embodied sense of

otherness, where they do see themselves as lacking, that allows them to view what the

others lack? De Beauvoir (as cited in Alexander, Carter, Hutchings, and Newman, 1998)

describes *otherness* as, "a fundamental category of human thought. Thus it is that no

group ever sets itself up as the 'One' without at once setting up the Other over against

itself" (p. 8). In a Lacanian framework, "otherness" derives its importance in terms of the

(mis)recognition of what the other lacks. For Lacan, "other" is not a sameness/difference

binary, but rather it is a condition of confronting the uniqueness of the other and its

demand on us raising the question, "What does the other want of me?"

From this project, I concluded that languages of possibility must be built that

allow teachers to live in the tensions that resist simplistic reconciliation through existing

and new master signifiers.[7] It is through opening up these possibilities that teachers will

be able to create places to *in-habit* where professional development is lived every day.

We come to be professionals by *in-habiting* places that resist easy signification. Each

teacher finds spaces within the (im)possible[8] antimony, as described by Flax (1990). For

the teachers involved in school initiated projects, which are termed Alberta Initiative for

School Improvement (AISI)[9] project, professional development did matter to them and

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[7] Master signifiers will figure prominently throughout the course of this dissertation. Signifiers are "stand-ins" that point to another where a signifier represents a sign – a continual recursion of always pointing to something; they are informed by master signifiers. For Evans, (1997) master signifiers are "that which represents a subject for all other signifiers" (p. 106); the master signifier is what gives meaning to all other signifiers. For example, the drawing of a dog is a sign that points to the signifier, "a dog" (as in the words).

[8] The portmanteau "(im)possible" is used to underscore the notion that teachers juxtapose themselves against the backdrop of change. The irony is that teachers' lives are much like a double-edged sword: they are constantly faced with change, but there is also the risk of resistance. Bracher (1996) reminds us of the enjoyment versus anxiety that is felt by those whose embody the signifiers at work in a given context.

[9] During the 1990s, the province of Alberta produced two variations of a three-year business plan that dealt specifically with improving accountability in education. Though not specifically detailed in the frameworks, the province announced the implementation of the AISI program that "provides funding to school jurisdictions for specific local initiatives and research to improve student learning and performance" (Alberta Learning 1999a).

they would carry out what they considered to be their professional responsibility

regardless of the presence or not of TPGPs. As Michael Fullan reminds us, "You cannot

mandate what matters". [10] I recognise teachers cannot randomly be allowed to teach

whatever it is that they choose or to write TPGPs failing to reflect sound educational

choices. In psychoanalytic terms, to do so would allow teachers to address their own

jouissance[11] (pleasure or pain of their drive impulses) rather than the needs of the

students. But, Lacan's work (1988) does not imply we are all free to pursue our

subjective desires: rather, we are *all* encumbered with the ethical responsibility to

recognise that we are always inextricably linked to others. Yet, it is the way we "enjoy",

that is to say, the way we sublimate our *jouissance* that leads to ethical responsibility to

those others.

Significance of the Study

In terms of their professional development, teachers are caught in a dilemma that

can be described in three ways. First, teachers are constantly caught in a play of tensions

between binaries such as being a "good" and "bad" teacher. It seems an in-between space

does not exist. An antinomy is created through an enfoldment where one cannot exist

without the other. One half, however, becomes privileging over the other; therefore,

defining each half by what it is (Derrida, as cited in Brown, 1999) and by what it is not.

Within the confines of the binary one cannot achieve the Ideal Ego of the "excellent

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[10] AISI Symposium, Calgary, Alberta, October 26, 2000.

[11] Loosely, the term "*jouissance*" means "enjoyment". It is an ecstatic pleasure that is beyond control, it is overwhelming and intense, which make it ego threatening. As Evans (1997) explains, the enjoyment is so intense that it moves "beyond the pleasure principle" to become pain: "painful pleasure" or "pleasurable pain" (p. 92). The almost sublime relationship described here parallels a comment made by one of research group members, "As much as I hate the growth plans and having to write them down, having to be accountable on paper, it does force me to thinks about, be deliberate about, the PD I do" Monique.

teacher" without excluding the bad object (the teacher who does not continually improve or develop professionally); "one of the terms in each set is privileged, thus, the other is suppressed or excluded" (Brown, 1999). Rather, we live in the spaces where we negotiate possible meaning from our work. As classroom teachers we are continually striving to achieve the Ideal Ego embedded in the *Ministerial Order #016/97* – to create ourselves as one who is other (in this case, the one who has the knowledge) and conveys that knowledge to our students. In this circularity where we struggle, we are constantly reconstituting ourselves to become the Ideal Ego (the other – that person who can achieve the KSAs embodied in the legislation) in any given situation we encounter no matter how banal or complex the circumstances may be.

Second, Lacan's notion of 'quilting' brings to the forefront that we are always being lured by signifiers, the descriptors that define us within a given context. Significations are ever changing depending upon the mediations that take place between social actors: those with power, those without power; those who can determine policy, those are expected to execute policy. In education, teachers are continually *subject to* and *subjects of* an array of representations that attempt to define and de-limit what is a "good school", a "good teacher", and "a good student". This phenomenon is increasingly made apparent against the backdrop of globalisation and the intensification of teachers' work (Richardson, 2002a).

In the day-to-day of teachers' work, it is as though we become tied, or sewn in, to whom we are by our very actions. Take, for example, a partnered female teacher with children. The signifiers attempt to suture or define what a person can be: female, mother,

aunt, sister, nurse, caregiver, wife, are continually in play.[12] The "quilting point", also

known as the "point de caption", ultimately leads to how we become defined by the

context of given signifiers, the descriptors that define us, and, therefore, how we are

constructed by our association within the context of a given signifier. The process of

'quilting' for Žižek (1989) becomes a possibility only when an uncertain relationship

subsists between the signifier and the context it refers to exists. Just as teachers ultimately

make sense of the documents they are subject to abide to, their meaning is shifted

because of a new interpretation perhaps because of personal reflection or because of

discussing the document with another person. Carmen, one of my research participants

for this dissertation, captured the disjuncture of her attempt to negotiate his professional

identity when she lamented,

> It is ironic that we are facing a shortage of math teachers, yet, at the
> same time, the pressures on teachers are growing to such a point that
> more and more are teaching part-time. I know many female teachers
> like myself who cannot keep up with family, career, being healthy—
> just trying to have a life.

The situation described by Carmen teacher is not unique, in fact, it reflects a growing

trend toward the re-feminization of teaching and the growth of part-time jobs. In 2004,

69.7% of Alberta teachers were female with the number expected to climb to 75% in the

next five years. The percentage of part-time employment continues to rise particularly in

urban areas. For example, in 2004, 986 out of a total of 4,971 Edmonton Public teachers

worked part-time.[13] With one out of five Edmonton Public teachers working part-time, it

is problematic to talk of "teachers' work" in a coherent and totalizing manner. The

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[12] Drawing on Lacan in Chapters 3 and 4, I will examine the discursive mechanisms that play on the body of the Real (the body cut by the Symbolic) and the body of the Imaginary (the body aesthetically mediated through the multiple contradictory play of signifiers).

[13] Internal communication, Alberta Teachers' Association, 2005 Member Opinion Survey and Alberta School Board Association database.

contingency of teachers' work status in rural areas is somewhat more stable with part-time teachers representing 10% to 14% of the teaching force. Attempts to suture a monolithic or homogeneous discursive reality for "teaching in Alberta" is and will continue to be interrupted by the myriad contradictory impulses that shape the education policy landscape.

Bracher (1996) illustrates the ramification of signifiers as a primary component of how we regard who we are:

> Our embodiment of signifiers valorized within a code can provide us
> with a profound sense of well being and enjoyment, and, conversely,
> our failure to embody such a signifier, or our embodiment of
> signifiers denigrated within a given code, can cause us severe
> anxiety or depression or evoke powerful feelings of aggression in us
> (p. 1).

How do teachers cope with working in an environment where they are unable to embody certain signifiers? This is again, a question where the Lacanian paradigm can provide some insight. Within the context of TPGPs and curriculum changes, tensions do exist. Teachers are stitched to a particular signifying chain giving sense to their experience and through which they recognise themselves as subjects, but the signifiers that are attributed to teachers are always changing and evolving.

Third, teachers inhabit an (im)possible space as will be underscored by the participants involved in this project. Each participant, as do I, lives within the context of tensions where their desires are never completely fulfilled. The mathematics curriculum, for example, is not a coherent text that teachers view as a unifying source amongst the circulating discourses. During the course of my research I delivered a workshop where teachers continually expressed their frustration with a mathematics program that they believe is in crisis. Adding to the complexity of the curriculum, the teachers involved in

this project did not believe that the integration of technology into the mathematics

program of studies was viable due to continually raising learner expectations for the

learning of mathematics in general. Teachers are caught by the (im)possibility of wanting

to be good teachers as defined by the Super Ego imperative to resolve the demand of the

Other. As outlined earlier in this chapter, the (im)possibility for teachers is that the Other

does not itself know what it wants. In the Alberta context, one need only turn to the

government's funding of education that has been a rollercoaster ride of cuts and huge

cash infusions driven by short-term responses to the publics' anger and resistance by

teachers. A recent manifestation of this approach to policy making was an announcement

that the government would meet critical infrastructure needs for schools as part of a

celebration of Alberta's 100th Birthday. On July 14th, 2005, Education Minister Lyle

Oberg,[14] issued a press release stating:

> School boards will receive an annual increase of $40.3 million in
> plant operations and maintenance funding as part of a new funding
> formula based on a per-pupil allocation.
> "This boost in funding will go a long way to helping school boards
> cover their utility costs and making sure schools are well maintained
> and in good working order," said Dr. Lyle Oberg, Minister of
> Infrastructure and Transportation. (http://www.gov.ab.ca/acn/
> 200507/1842895BEC42E-7821-44E6-A00E3B46697CC48C.html).

The offer of "generosity" by the government is a gesture that attempts to valorise

and codify (Bracher, 1996) our enjoyment as being possible only within the gaze of the

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[14] Ironically, Dr. Lyle Oberg, the former Minister of Education, is currently the province's Minister of
Infrastructure and Transportation and he is now faced with rectifying problems associated with the chronic
lack of funding in Education in the past decade. As an example, the Canadian Union of Public Employees
indicated that the Calgary Board of Education, "stands to receive an extra $4 to $6 million next year.
However, the board's backlog of infrastructure repairs is estimated to be $300 million" (http://www.alberta.
cupe.ca/03news/releases/20050715-infrastructure.htm).
Some cynical opponents of Dr. Oberg have dubbed him "The Minister of Pavement" as a means of
bringing forth the connotation that the move from the former ministry to the later, is a demotion.

benevolent Tory government. This, again, is a reminder from Žižek (1989) of the

importance of understanding how power attempts to efface "its own trace" (p. 102).

From the rollercoaster approach to education funding to curriculum

implementation policy, the Alberta government continues to expose itself as a stranger to

its own desire. What the government wants (its psychic demand) of teachers and the

education system is the very thing it cannot have: compliance to capricious funding and

policy while calling for "excellence" in education outcomes.[15] Alberta teachers

incessantly are expressing feelings of frustration with their working environments.

Consider one teacher's comment regarding the new mathematics curriculum that she

feels does not foster one clear-cut method of delivery:

> When we got that new curriculum I looked through it and I tried to
> teach a lot of the strategies that they suggested. I thought, "I can't do
> this". So, personally, I look at the concept and I think, "What do
> they need to know?" Then I implement my own strategies, which is
> pretty much what they are asking. I don't use their step-by-step
> suggestions in that text because it's really hard.

The ambiguity between text (the mathematics curriculum as sutured in-between the

government and teachers) allows for the question: What do curriculum documents think

we are? Drawing from Lacan's *Écrits*, Žižek (1992a) argues, "a letter *always* arrives at its

destination" [his emphasis]: it waits for its moment with an ineffable patience – if not,

then another contingent little bit of reality will sooner or later find itself in that place that

awaits it and fire off the trauma" (p. 11-12). At the point where the reader's desire is

activated, the letter has arrived at its destination. It is at this point where the reader is

"hooked", a fantasy is created or, paradoxically, a trauma is created in order to maintain

the subtlety of the concept of the signifier of the letter.

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[15] A cursory review of the Alberta Education webpage (http://www.education.gov.ab.ca/) illustrates the government's enthusiasm for its conservative agenda.

For me, Žižek's work in this area brings into question the numerous possibilities for teachers interpreting curriculum documents. The documents are written and reviewed by a core of teachers who are considered leaders in the subject areas in which they are responsible for curriculum development. Teachers, who in turn implement curriculum change, interpret and implement the documents based upon their experiences as educators and learners. Little to no attention in given to mediating the grounding philosophies embedded within the new curriculum documents into teachers' current teaching practice. Even though the interpretation and implementation may be far from the original contradictory intentions authored and inscribed by the government (the Big Other), it is nonetheless more true for the teacher who works to incorporate the changes into their teaching practice.

Drawing on a Lacanian psychoanalytical cultural critique, my study will excavate the social, political, and psychological contexts that are now situated for Alberta's mathematics teachers. Because there are many curriculum documents that influence teachers' work, Chapter 2 is designed to familiarise the reader with these documents. The reader is formally introduced to research participants in Chapter 3 even though their stories are introduced throughout the course of this dissertation. The reflections and analysis of the research group are presented in this chapter, as well. Chapters 4 and 5 will provide a conceptual scaffolding for unpacking the discursive negotiations and mediations attempted by members of my research group. For me, it was imperative to map out the Lacanian concepts prior to investigating the ties between action research and what transpired in the research group's discussions where the six of us, Bruce, Shelly, Carmen, Monique, Chantal, and I uncovered together: the endless reshuffling and

mediation that is necessary in order to maintain any semblance of a coherent teacher identity. A discussion of the implications for using action research within a Lacanian psychoanalytical cultural critique is found in Chapter 5. The final chapter will explore a theoretical turn that helps us to better understand the discursive and psychodynamic mechanisms used by government policy makers to foreclose and re-inscribe their (im)possible demands on teachers' work. What we discover is that we are continually drawn into the trap of fixing and re-suturing a new homogenous discourse of permitting only one way to perceive professional practice.

It's really hard to know what's a good idea when you're growing and these ideas don't hold still and neither do you.

Hyde (1999, p. 46)

CHAPTER 2
ADDING UP THE SOCIAL POLITICAL CONTEXT

In the past decade, teaching in Alberta has undergone a profound transformation; teaching and the degree of increased accountability placed upon teachers have both directly and indirectly affected ways in which teachers view their teaching positions and the ways that they view themselves as teachers. For this study, it is important to situate teachers in the dilemma where they find themselves. The three curriculum documents, referred to in Chapter 1, (the Western Canadian Protocol (WCP) Mathematics Curriculum, the *ICT Program of Studies*, and the *Ministerial Order #016/97* that governs TPGPs) that shape one's teaching practice can be represented, in terms of their relationship with one another, in Figure 1:
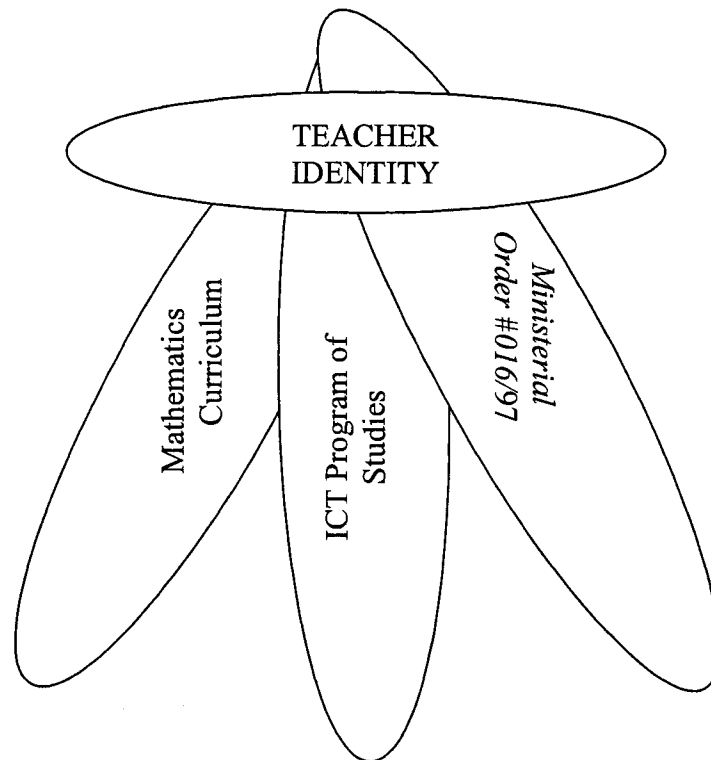
Figure 1. The perturbations of three influences on Alberta mathematics teachers

Notice, in Figure 1, how the mathematics teacher's identity is the site of perturbation for the three curricula and how teacher's identity is equally affected by the three sites. The WCP and ICT are documents that set forth student outcomes for learning, thus give direction for teachers to individualise their teaching practice. TPGPs are a different type of document; they create spaces for reflection so that teachers can pinpoint and work towards ameliorating their teaching practice. The perturbations, therefore, represent three areas of change teachers in Alberta have been mandated to assimilate into their day-to-day teaching practice.

The Tides of Change

During the past decade, I have seen many shifts in epistemological education. Two of major changes are the increased presence and influence of the corporate agenda and the intensification of teacher work. For Gee, Hull, and Lankshear (1996), "the business world...now sees *knowledge* (their emphasis) as its primary 'value'" (p. 5). They posit that business is primarily interested in how knowledge can be used as, "leverage in order to invent expeditiously, produce, distribute and market their goods and services" (p. 5). Importantly, to me, it seems as though educational institutions no longer discern what is constituted as "knowledge" because of the influence of the business world demanding what is to be taught to students. The post-industrialised world of capitalist commerce is positioned as the expert regarding the question of what constitutes knowledge.

Along with school curricula reform, teachers have been faced with growing pressures to become more accountable to more stakeholders while classroom support has decreased. The intensification of teachers' work has manifested itself not only because of public pressure, but also because the corporate agenda has become more pervasive under the signifier of "reform". Intensification, according to Gee, Hull, and Lankshear (1996) in education stresses the necessity for, "life-long learning and the need continually to adapt, change and learn new skills, very often *on site* while carrying out the job" (p. 6). Alberta Learning has positioned itself as a proponent of life long learning and openly stresses this fact throughout the *Ministerial Order #016/97* and accompanying *Teaching Quality Standard* (Alberta Education, 1996a).

Change in teaching expectations is becoming increasingly complex and chaotic, not to mention daunting. Rapid and unsupported change in the classroom are now the norm. The dynamics of the classroom are influenced by this change as well as the necessity for the teacher to be able to educate students from an unprecedented number of cultures who speak an extraordinary number of languages act as a means "to [achieve] higher academic standards than ever before" (Darling-Hammond, 1998, p. 7). Teachers are not inherently averse to change; it is not a new phenomenon within the education system. Phelan (1996) argues it is teachers' identities within a changing environment that is creating tension and stress. With all of the societal implications placed aside, what do teachers need to do in order to change their practice? How can change foster "better" teaching?

Teachers are not under the delusion that curriculum changes are anti-productive; they realise curriculum change and reform are an inevitable part of teaching (Hargreaves, 1994). However, Hargreaves cautions, "responding to the complex and accelerating changes in isolation will only create more overload, intensification, guilt, uncertainty, cynicism and burnout" (p. 261). In his work regarding intensification of teachers' work, Livingstone (1994) suggests teachers must identify and address major issues and solutions that need to be arrived at in order to ease the accompanying ramifications such as cynicism and burnout.

Klette (2000), in studying issues pertaining to teachers' behaviour, concluded that teachers are increasingly "going through the motions of teaching" as a result of top-down mandated reform. For Klette,

> Although teachers may be going through the motions of
> implementing the policy in schools, they do so because they have

been rendered powerless by change which is couched in the rhetoric
of professional responsibility and competence (2000, p. 98).

The three perturbations discussed earlier in this section highlight how "reform" continues

to relentlessly intensify a teacher's work. For some, the effects of this wave are a mere

ripple. However, when additional changes are added to the ripple, the wave intensifies.

With a third change, a tsunami has resulted. In what follows, I will further describe three

major changes that have impacted mathematics teachers in Alberta over the past decade.

Mathematics Curriculum Reform: The Ripple Effect

Adherence to the WCP mathematics curriculum, the ICT *Program of Studies*, and

the TPGPs is a legal obligation for all mathematics teachers in the province of Alberta.

Both programs of study outline what teachers are to teach and reflect the underlying

philosophies of how to teach the specific subject areas. Teachers then are obliged to teach

particular content in particular ways, content and methods with which they may or may

not be familiar.

The first ripple moving toward the current mathematics curriculum was the

inception of the WCP and the release of the *Common Curricular Framework for K-12*

Mathematic, in 1996, by Alberta Education. The WCP was intended to unify content

standards for mathematics in the four western provinces, but not to be a program of

study. The WCP was an attempt of the Ministers of Education to establish common

educational goals among the four western provinces and to set guidelines as to how these

goals would be reached and was deemed as a necessity because of perceived problems

with Canadian standards from province to province. The WCP invoked a set of outcomes,

specific to individual grade levels, to raise learning levels for Western Canadian students.

Not only was the intent that student achievement in mathematics would increase as a result of the implementation of the WCP, but also that a common curriculum would be taught across the four western provinces, thereby instituting a curriculum transferable between jurisdictions. This document was written by all partnered provinces, but the implementation was led by Alberta educators because Alberta mathematics students had achieved higher scores on standardised tests than students from other provinces and consistently ranked in the top three countries on international examinations (L. Beauchamp, personal communication, July 27, 1998). Even though all the Western Canadian provinces were involved in the writing of the WCP, Alberta took the lead insofar as implementation.[16]

With the acceptance of the WCP and the ensuing changes it influenced in the Mathematics Program of Studies came the need for teachers to learn a variety of teaching strategies to assist students in accomplishing the stated outcomes. Strategies include teacher directed learning, collaborative learning, learning through practice, constructivist approaches to learning, project-based learning, and learning through manipulating concrete material, transferring concepts learned through manipulating concrete materials to symbolic representation, to processing the symbolic representation to abstract ideas and concepts, to name a few. The *Common Curricular Framework for K-12 Mathematics* outlined changes to the mathematics curriculum from kindergarten through to grade twelve. The changes embodied the intent of the WCP to enhance student learning as well as others to make teachers more efficient.

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[16] McCabe (2000) has written a comprehensive thesis describing the writing process and the rationale for the new mathematics curriculum.

The major change put forth in the new mathematics curriculum is the creation of "Pure" and "Applied" mathematics at the senior high school level. Until the end of Division III,[17] all students in Alberta follow one stream of mathematics. Once in senior high school (Division IV), students must currently opt for mathematics from either two programs – "Pure" and "Applied" or for a less academic stream – Mathematics 14-24 and Mathematics 16-26. Although the Pure and Applied streams are not direct replacements for the former mathematics programs, teachers generally concur that Pure Mathematics replaces Mathematics 10-20-30 and Applied Mathematics replaces Mathematics 13-23-33. The designations of Mathematics 14-24, Mathematics 16-26 (designed for students with special learning needs) and Mathematics 31 (pre-calculus) will remain unchanged (Alberta Learning, 1998b, pp. 2-3); however, changes to the Mathematics 14-24 stream are currently being implemented. In contrast to the ways the teachers view the streams, the curriculum developers saw Applied Mathematics as a program designed for students interested in vocational post-secondary programs. It emphasises technical problem solving (Alberta Learning, 1998b, 2001) and provides students with different conceptual tools than students enrolled in the Pure Mathematics program. For example, the applied stream emphasises the use of numerical and geometrical approaches to problem-solving while the pure stream focuses on theory building such as construction of proofs and algebraic and graphical approaches to problem solving (Alberta Learning, 1996b, p. 19). In reviewing the WCP rationale, it is clear that, although "high standards" are expected of

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[17] In Alberta, grades are classified according to the following divisions:
      Division I: Kindergarten – grade 3
      Division II: Grades 4 – 6
      Division III: Grades 7 – 9
      Division IV: Grades 10 - 12

all students, the type of intellectual functioning associated with each program is distinctly different.

The implementation phase for the new senior high school curriculum commenced in September of 1998 with a completion date of September of 2002.[18] There exists a conflict of desires within the context of the new mathematics curriculum. On one hand, the government professes that the mathematics program of studies is unique and not connected to any of its predecessors. On the other hand, teachers continue to attempt to make links between the old stream and the new because of the lack of in-servicing prior to the new curriculum implementation. (K. McCabe, personal communication, January 17, 2001). Take, for instance, this teacher's comment:

> You know this 30 curriculum matches the old 30 better than any of the other ones. We looked at the changes and thought, "Oh thank God, it's old stuff with a new complexion, it will be fun to teach because it's going to be something new". And you know what, it is the same, it's the exact same.

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[18] Following the release of the Provincial Achievement Test (PAT) marks, the Minister of Learning, Lyle Oberg, announced that changes to the mathematics curriculum might be forthcoming. He noted that at the grade nine level, students' marks had declined in reaching the acceptable standard over the past two years. This concern was made public on September 25, 2003 on a local television station, CFRN. Dr. Oberg stated that his department would be sending evaluators into various junior high school mathematics classrooms with the intent of assessing whether it is the teacher's teaching or a too rigorous curriculum that was responsible for the declining test scores. A press release posted on the Alberta Learning website indicated the following:

> Alberta Learning will consult with teachers and jurisdictions this fall on ways to improve junior high math, and based on the feedback, will implement changes next year. Many school authorities across the province already provide courses for teachers in math upgrading and a number of Alberta Initiative for School Improvement (AISI) projects focus on math at the junior high level. [In the fall of 2004], LearnAlberta.ca will release a junior high multimedia resource to further assist student learning in Grades 7, 8, and 9 Math.
> http://www.learning.gov.ab.ca/news/2003/September/nr-ProvincialTests.asp

Interestingly, Oberg commented very little on the results from the grade twelve diploma marks; he indicated that the marks have slowly been improving to reach an acceptable level. One of my colleagues commented, "That's only because the diploma exams have been made easier so that the parents won't complain". My concern is that if changes are made at one end of the curriculum, how will it impact teaching and learning at the other.

When I pursued this comment with my research group, Shelly commented, "There is no way that the two programs are the same; they are as different as night and day! This is one of the biggest misconceptions that people have…that and trying to assess the outcomes in a new curriculum, with a new philosophy, in old ways. Obviously, they [the teacher] don't "get" the curriculum". Kilpatrick and Silver (2000) cite the inconsistency between how teachers teach and how they assess; it is only on rare occasions that teachers assess their students using tools that ask them to demonstrate their mathematical thinking rather than their mathematical knowledge. The new mathematics program of studies pushes both teachers and students to investigate their understanding of mathematics.

Technology: Surfing the Wave

Alberta Education (1996b) set the instruction of information technology as one of the goals of *The Common Curriculum Framework for K-12 Mathematics*; however, there is a difference insofar as the emphasis of technology in the pure and the applied streams. For example, the goal of increasing the use of information technology in pure mathematics is achieved by having students use technology to investigate abstract mathematics, while in applied mathematics the stress is on more "real world application and better preparing all students for post high school" (the former being geared toward universities bound students, while the latter prepares students for colleges level courses). In the *Revised Parent Handbook* (Alberta Learning, 2001, pp. 3-4), the following elaborations of the two programs is offered:

> Pure Mathematics courses emphasize the specialized language of
> algebra as the preferred method for learning mathematical concepts

and for solving problems. Students learn about mathematical
theories, find exact value solutions to equations, and use formal
mathematical reasoning and models in problem solving. Compared
to the former Mathematics 10–20–30 program, 80 per cent of the
new Pure Mathematics 10–20–30 program is the same. About 10 per
cent of the program, primarily those related to finance and statistics,
is from existing mathematics courses; and the remaining 10 per cent,
related to mathematical proofs and the analysis of functions, is new
content.

Applied Mathematics courses focus on the application of
mathematics in problem solving. Through challenging and
interesting activities and projects, students further develop their
skills in mathematical operations and in understanding concepts.
Students in Applied Mathematics construct graphs, scale diagrams
and tables, and use computers and spreadsheet programs to perform
long and complex mathematical calculations. Graphing and
spreadsheet activities provide opportunities for students to develop
competency in algebra while solving problems relevant to today's
world.

In 1998, Alberta Education released the *Learner Outcomes in Information and*

Communication Technology (ICT) document. The integration process was to build "a

curriculum within a curriculum"; to integrate technology into the existing core

curriculum comprised of math, science, social studies and English language arts. The step

from "integrating technology into the curriculum" to "integrating curriculum into

technology" was made in 1999 when the *ICT Program of Studies* was endorsed as a

standalone curriculum document.

In January 1998, Alberta Education published *School Board Education Plans,*

1997-2000, a summary of school jurisdiction plans that concluded with a section dealing

with technology issues as they relate to schools and laying the ground work for the

current *Guide for School Board Planning and Results Reporting* (Alberta Learning,

2003c).[19] The plan was designed to assist school boards with pinpointing what should be included in their three-year technology plans. Discussed were issues related to implementing technology and integrating technology into current teaching practice and the curriculum. Following the publication of the *School Board Education Plans*, final changes were made to the *Interim ICT Program of Studies*, as a result of and from feedback solicited from stakeholder groups, before it became a finalised program of studies in 2000.

To contextualise the use of technology in classrooms, the *ICT Program of Studies* preamble describes the use of technology as little more than a tool that has simplified our lives. The document states information technology is not unlike any other emerging invention that has had a tremendously beneficial impact on our personal lives. The preamble explains the virtues of technology as a means of introducing a rationale for setting the learner outcomes, including the unlimited possibilities for, and the usefulness of, technology. There is, however, an unmistakable vision of the student as a "knowledge-worker" whose future is inextricably linked to technology. In my work with teachers in Alberta, I have witnessed the tensions that exist whereby mathematics teachers, working to implement a new curriculum, find themselves torn between what should be the focus of their TPGPs: mathematics or technology.

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[19] Specifically, the 1997 plan presented the following technology recommendations for all Alberta students. These recommendations can still be found in the 2003 guide:

1. Demonstrate competence in using information technologies.
2. Improving access to information technologies.
3. Information technology is integrated into education to enhance student learning, and increase the efficiency and flexibility of delivery.
4. To ensure that school boards deliberately address the new directions for technology in education, Alberta Education has required that each jurisdiction have a three-year technology plan.
5. The Technology Planning framework, the local technology plan, is part of a much bigger picture. It must be linked closely with the board's three-year education plan and annual education results report – both of which are ultimately connected to the province's business education plan (Alberta Learning, 1998c).

In the *ICT Program of Studies* there is a discussion of the fact that students must learn how to "determine which *processes*, *tools* and *techniques* to use, and when to use them" (p. 1). The document continues, "Technology will serve today's students well—in entry-level work and beyond" (p. 1). The document states, "students must be prepared to *understand*, *use* and *apply ICT Program of Studies* in *effective*, *efficient* and *ethical* ways" (p. 1). Many elementary teachers I have worked with have commented that they cannot comprehend the mandating for students in Division I grades to use technology, specifically, computers. As one teacher pointed out, "I am sure that Bill Gates did not have computers in his elementary school. He seems to be quite computer literate despite that handicap!"

Despite the fact that the intent of the ICT program is to infuse technology into existing courses, it is clear that tension between curricular infusion and curricular addition remains. It also leads teachers to question why students must be able to understand, use and apply a curriculum document that is clearly used by teachers as a basis for planning technology integration. It seems to me that there has been an unrealistic approach to technology integration; the lack of touch with reality and enormous expectations placed upon students is the wave, as it begins to swell, that hits the teacher in the form of increased responsibilities. Again, the corporate agenda and teacher work intensification are felt even more in the ICT curriculum than in the mathematics curriculum. For example, during the Winter of 2001, I reviewed a draft document entitled *ICT Classroom Assessment Toolkit: Grade 3* (2003a). One of the proposed tasks included the following:

CREATE A MOVIE REVIEW

> As a movie reviewer who wants to be hired by a local newspaper,
> prepare a multimedia presentation to show the newspaper editor that
> you know how to develop and present an online newspaper review.
>
> Use an electronic graphic organizer to build a storyboard for your
> movie review. Develop your movie review using text, sound and
> visual images.
>
> Your review needs to:
> - indicate the genre (type) of the movie
> - summarize the main idea
> - describe your favourite parts
> - express your feelings about the movie
> - give it a rating.
>
> Use visual aids, such as multimedia presentation software, to present your
> opinion (p. 38).

I seriously question what agenda is valorised: that of sound educational practice or that

which is influenced by the corporate agenda. Not only does the technology wave increase

teacher anxiety caused by over zealous expectations, but I also question seriously the use

of technology just to use technology that pushes it into grade levels that are not

educationally appropriate. What are the goals and benefits of students using technology

applications of these sorts at the Division I level when it is not expected of the students

until the end of Division II? My argument is that if we want students to be able to make

appropriate decisions as to when it is best to use technology, teachers need to be equipped

with appropriate pedagogical practices and these practices must be appropriately

presented in all supporting curriculum documents. Furthermore, teachers need to access

professional development that not only teaches them how to use various technology

programs and devices, but also furnishes them with a critical perspective where

technology is used (Judah, 1999).

Teacher Professional Growth Plans (TPGPs): The Tsunami

During the course of curriculum change in mathematics and with the inclusion of

the *ICT Program of Studies*, professional development became a contractual obligation of

Alberta teachers. During the initial implementation stage in the early 1990s, no funding

was available to support curriculum changes in mathematics. However, in the spring of

1999 the Government of Alberta announced support of 2.2 million dollars for

Professional Development in the area of mathematics. Funds were released to the

Regional Consortia, the only agency able to access the funding and, consequently, the

only vehicle through which teachers could access professional development funding.

Many mathematics teachers were not given the choice by their administrators but to

include attending consortia workshops as part of their TPGPs.

As has been mentioned, TPGPs have had a dramatic impact on the professional

lives of Alberta's teachers and have raised serious challenges for the professional

development of Alberta's teachers. The Alberta model is now one of the driving forces

for other provinces, such as New Brunswick, to assist educational stakeholders in

bridging the gap between teacher competency and accountability.

Currently, all teacher professional development for teachers in Alberta is

governed by the *Ministerial Order #016/97*. Typical of regimes of "power edifices"

where social power enforces social conformity (Žižek, 1999, p. 256), the *Ministerial*

Order #016/97 was seen as a means to improve teaching – a goal cited in Alberta

Education's *Three-Year Business Plan* (1994) and, subsequently, the *Teaching Quality*

Standard (Alberta Education, 1996a). The descriptors of the KSAs relating to permanent

certification from the *Teaching Quality Standard* deal with improving teaching and were

a major influence for the *Ministerial Order #016/97*. The goal reads as follows:

> k) Teachers are career-long learners.
>
> Teachers engage in ongoing professional development to enhance
> their: understanding of and ability to analyze the context of
> teaching; ability to make reasoned judgments and decisions; and,
> pedagogical knowledge and abilities. They recognize their own
> professional needs and work with others to meet those needs. They
> share their professional expertise to the benefit of others in their
> schools, communities and profession.
>
> Teachers guide their actions by their overall visions of the purpose
> of teaching. They actively refine and redefine their visions in light
> of the ever-changing context, new knowledge and understandings,
> and their experiences. While these visions are dynamic and grow in
> depth and breadth over teachers' careers, the visions maintain at
> their core a commitment to teaching practices through which
> students can achieve optimum learning.

The *Teaching Quality Standard* (Alberta Education, 1996a) led the Alberta Teachers,

Association (ATA) to release a teacher professional development position paper in 1996

(http://www.teachers.ab.ca/ publications/evaluation.html). This position paper has been

revised and now stands as two separate documents: *Professional Growth, Supervision*

and Evaluation, last revised in 2000 and *Professional Development*, last revised in 2001.

As a result of the ATA's revised position papers, five initiatives are being acted

upon currently:

> (1) teacher competencies
> (2) teacher preparation
> (3) teacher certification
> (4) teacher evaluation
> (5) the need for teachers to continue to keep pace with changes in
> technology, curriculum, teaching techniques and social realities, but
> also to predict future needs of their students and the educational
> system (http://teachers.ab.ca/policy/papers.cfm?p_ID=199 and
> http://teachers.ab.ca/policy/papers.cfm?p_ID=82).

One area that the ATA is to be commended for in the above two position papers is maintaining the steadfast belief that the responsibility for timely and effective Professional Development lies within the capabilities of all individual teachers who are urged to self-evaluate their own abilities and needs.

In the *Teaching Quality Standard* (Alberta Education, 1996a), Gary Mar, then Minister of Education, identified KSAs expected of both graduates and practicing teachers. Universities offering Bachelor of Education degrees were required to provide instruction ensuring that their graduates possess competencies in the identified KSAs in order for prospective teachers to be issued an interim teacher's certificate. Furthermore, graduates from Faculties of Education would need to attest they have acquired the necessary KSAs needed to teach in Alberta schools. For Phelan (1996), the introduction of such norming documents as KSAs only adds to the drive toward standardization in teaching and has taken on the guise that teaching is "less of a social and cultural relationship and more of an economic and commodity relationship" (Smyth, 1992, p. 284).

Returning to the *Ministerial Order #016/97*, its purpose is to safeguard that teachers in the province of Alberta demonstrate the ability to carry out their duties with the best educational interests of students as the core of their teaching roles and that teachers can support optimum student learning. In order to implement the *Order,* superintendents, principals and teachers are directed to work together to attain the standards set forth in the *Teaching Quality Standard* (Alberta Education, 1996a). It is intended that through collaborative efforts, framed as reflective practice, meaningful

feedback, assistance, and opportunities for improvement of teacher performance that promote positive outcomes in student learning will occur.

The *Professional Development for Teaching Technology Across the Curriculum: Best Practices for Alberta School Jurisdictions* (Alberta Learning, 1999) underscores the tenet set forth in the *Order*, "teachers are key decision-makers in their own professional development, not passive recipients" (p. 11). At one level, the advent of TPGPs promises opportunities to extend and formalise teachers' reflective practice. TPGPs are designed to prompt a career-long process whereby a teacher annually develops and implements a plan to achieve professional learning objectives or goals consistent with the *Teaching Quality Standard* (Alberta Education, 1996a).

There are a number of elements that educators must adhere to within their TPGPs. In particular, teachers are responsible for creating a TPGP on a yearly basis. Their plans must:

> i.   reflect goals or objectives based on self-assessment of learning needs by the individual teacher;
> ii. show a demonstrable relationship to the Teaching Quality Standard document;
> iii. take into consideration the educational plans of the school, the school authority and the government, or the program statement of an ECS operator (*Teaching Quality Standard*, Alberta Education, 1996a, p. 11).

With respect to professional development, TPGPs create several dilemmas for teachers. The first dilemma pertains to external constraints placed upon teachers by the government and by their respective school boards. During a TPGP workshop I conducted, one teacher raised a commonly-posed question, "If the TPGPs are supposed to reflect what I see as my weak areas, then why do I have to include anything about how the school, the school board or the government views education?" Fundamentally, who are

TPGPs for and what purpose are they truly serving? More importantly, how do teachers

then interpret the intent of the TPGP once they read through the *Ministerial Order*

#016/97, if they balk at the process they are expected to embrace? For me, this raises the

irony of the call for "reflective practice". It would seem that reflective practice is

constrained by what teachers *should do* and not what school administrators and policy-

makers want the teachers *to do*. Specifically, the issue for some teachers focuses on the

question of supervision outlined in the *Ministerial Order #016/97*. While it suggests that

administrators should support teachers in achieving their professional development goals,

there has been remarkably little done to promote this activity in schools. As one teacher

suggested, "We have been made responsible for improving the elements of our

professional practice but with little or no control over the conditions that shape our

practice".[20]

With the ATA becoming a strong advocate of teachers' abilities in pinpointing

their own professional development needs, the crucial ingredient becomes the teacher's

ability to accurately and truthfully reflect upon their teacher identity and how this shapes

how frank teachers are willing to be regarding their professional development needs.

Jacobsen, Clifford, and Friesen (2002) describe our teaching reality as one where, "we

can no longer afford to think of engaged learning, nimbleness, creativity, and

commitment to action as educational "frills." Multiple and conflicting perspectives are no

longer problems to be fixed, ignored, or eliminated" (p. 364). As I note at the beginning

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[20] Time and money have been two of the contributing factors that undermine the effectiveness of TPGPs. Couture (2000) highlighted these two areas as a result of a survey conducted by the ATA in the spring of 2000. Couture writes, "Across the province time for professional development is tight while modest suggestions such as freeing up teachers from supervision are considered unrealistic or pie-in-sky.... The survey concludes that professional development expenditures currently represent about 0.34 percent of school operating budgets in Alberta."

of this chapter, the current state of education in Alberta reflects these tensions and manifests themselves in the three perturbations where mathematics teachers attempt to reconcile their identity.

Teachers' stories and teaching realities play an essential role in helping us situate them within their classroom lives. In order to further investigate these identiies and the affects of the three perturbations, the following chapter introduces the research participants Bruce, Shelly, Monique, Carmen, Chantal.

She wasn't sure if he was asleep. She allowed herself to drift into a
feeling, a sense, that she somehow watched all this from above. Not
so much physically, but more in a sense of perspective. She'd been
so sure it was over, but if she could have gotten up a little higher,
seen a little further, she might have been able to see this. She
wondered if she would remember this feeling the next time
something seemed, in the short run, to be going wrong. She knew
she probably would not. She knew that people transcended that line
of knowledge all the time, but damned if they didn't tend to cross
right back again.

Hyde (1999, p. 173-174)

CHAPTER 3
PRECIOUS (LOST) OBJECTS: (IM)PROVING OUR PRACTICE AS TEACHERS

The images we look toward, gesture toward, are the "point of our demand" where

we can only attempt to fulfil our desires through our demand to do so; however, a

Utopian end, can never be attained. It is through this research that I investigated the

question of how a Lacanian framework helps to open up the space of ironies and

contradictions created by mathematics curriculum documents and TPGPs. In order to

attain the stated purpose of this work, I worked with a group of five mathematics

teachers, from across all grade levels, who taught in or around a large Alberta centre. The

makeup of the group of five was: two teachers were involved in the pre-study while the

remaining participants were mathematics teachers I worked with in various capacities

such as workshop delivery and through my involvement as a university facilitator for the

University of Alberta. All five participants were considered to be leaders in the area of

mathematics and have worked in a number of leadership roles during the implementation

phase of the latest curriculum changes.

Our group met on a monthly basis during the course of a school year, with the exception of one month when a majority of the teachers involved in the study were on strike,[21] with the intention to discuss such implementation issues as: the meaning of various curriculum documents; the role of TPGPs and KSAs in promoting acceptance of curriculum change in Alberta; how curriculum changes have influenced the individual teacher's teaching practice; and, to what extent those involved in the study group believes that each current government initiative influences their teaching. Discussions went beyond the scope of these fundamental questions and were influenced by the political climate of the school year, including labour unrest and working conditions.

In order to create an open, non-threatening atmosphere in which teachers could openly discussed their views toward curriculum change and TPGPs, dinner meetings were held at my house. All meetings were audio taped, transcribed, and returned to the participants for their feedback and reflection. After each session, I recorded my thoughts in a research journal. Issues arising from the transcripts and my reflections acted as points of departure for subsequent meetings. Questions asked of the participants emerged from the previous discussion group responses. Following a session where we discussed the four Lacanian discourses (the Discourses of the Master, the University, the Hysteric and the Analyst) and once participants approved the transcripts, the participants were assigned the task of coding the transcripts according to the discourses. This task was assigned as an individual activity and the group met a week later to discuss their coding and what conclusions they could draw from the data. Some of the most interesting

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[21] Although no research was done on any school division property or during school hours, all school board employees from one school board cautioned their teachers that they were not to continue with any research projects. According to the ATA, school boards do not have the authority to insist teachers cease all external research; however, the group felt more comfortable respecting their school board's directive.

insights the participants put forth arose from this final stage of the research. During our

last meeting, Chantal reflected on the exercise:

> I got a lot of (discourse of the) Hysteric…a lot of protesting against
> education, I have the idea of PD hysteric, protesting against PD
> because the school board's not willing to pay for it…and a lot of
> protesting against the role of the teacher. Protesting against PD,
> trying new things, making a situation work but protesting against
> it…. A lot of teachers still have good intentions…but they're just
> behind. There's a lot of, what's the word I'm looking for, I don't
> know, but when you do something and you're not happy with it but
> you do it anyways. There's still a grudge behind it. That's what I've
> noticed a lot. And then there is like BC protesting against a new
> program there is still that hysteric there. So what I got out of this is
> the goodness is still there. I can see the teacher…wanting to still try
> new things and try to become the master, but that can't happen.

Carmen added:

> I had some Hysteric as well. I did find a little bit about the university
> and the analyst wanting to know, especially with your situation
> Chantal when you were in Smoky Lake and about the
> correspondence that they were asking you to do…and how that
> works and why it would happen and how it could happen. I thought
> that that was a little bit about discourse of the University, searching
> for the truth. And if…teachers are going to be on strike for a certain
> length of time, is it up to us to provide for the students while we're
> out? (There's) a lot of the hysteric;…you don't know what's
> happening and everybody's looking for some kind of truth
> but…everybody's story is different.

Bruce's experiences were slightly different from the rest of the group. Bruce viewed the

link between professional development as an opportunity to grow as a professional rather

than to limit his thinking to the four Lacanian discourses. He indicated:

> My context totally shifted from…when we were talking and so forth
> to just after that we left for our math conference…so my attitude
> radically changed. …I was really excited to be…given that
> opportunity to go and the fact that many of the teachers from our
> project had support from their schools in varying degrees but
> certainly you know they had their blessing and some support in
> terms of time and funding to make that trip…. The difficulty wasn't

that they were down on professional development or receiving it. I
think it was that the conference, for lack of a better term was so
successful it was difficult to get into one session and therefore it was
that frustration. But there was that eagerness to show and collaborate
and bring back.... But I guess, if it came to an individual needing or
wanting or choosing to do professional development in the normal
course of the year without these special considerations given to an
international math conference of that scale, I'm not sure how my
reaction to the whole professional development situation would have
unfolded.

When I asked the participants how they thought that the discourse might influence

the ways that they perceived professional development, Shelly commented:

I feel like I am going to look at the people in my sessions differently
now. If the six of us sitting in this same room feel the same thing,
even though we don't work together...man, I will really think a lot
more about how I say things and try to work with the teachers. I
guess it's just being aware a little more.

For the teachers involved in the research group, the vanishing mediator plays an

important role. Because of the interactions that occurred among the five teachers, they

questioned their actions and, in turn, were able to restore the master signifiers after taking

into account new considerations presented to them through the Symbolic and the

Imaginary.

From the point of data collection, I reduced the data by looking for "patterns,

categories and themes" (Cresswell, 1994, p. 154) in an attempt to interpret the data and

dissect it to get a picture of the larger situation. Specifically, my study evolved to deal

with the following two key questions: Where does *jouissance* lie for the teachers

involved in this study? What are the master signifiers that come into play as the teachers

attempt to incorporate government initiated change into their teaching practice?

Even though all teachers involved in this study were considered to be on the

leading edge of professional development and curriculum development in the province of

Alberta, each participant approached the discussion with varying degrees of experience with TPGPs; a point that became clear during our first meeting. In order to contextualise the research undertaken, what follows is a description of the journey engaged in by each member involved in this research.

The Band of Five

Bruce

Bruce was hired as a mathematics consultants by a large city school board in Alberta after his school board had received a large sum of money from the AISI project funds. His position involved primarily providing professional development to junior high school mathematics teachers as well as vetting and submitting AISI proposals, reporting AISI project progress to Alberta Learning, and coordinating all mathematics AISI projects submitted by his school board that were accepted by Alberta Learning.

Prior to accepting the position as an AISI coordinator, Bruce had been a junior high school mathematics teacher for approximately fifteen years. Bruce had shown exemplary work with classroom teachers and leaders while fulfilling numerous leadership roles he undertook during his eighteen-year teaching career. He explained that working as an AISI coordinator was a natural extension of the professional development work he had previously accepted.

When the study began, Bruce was quite familiar with TPGPs. As a classroom teacher, he had been responsible for writing a TPGP for the past two school years. Bruce remained dubious; however, as to the effectiveness of TPGPs. At our first meeting, we

discussed each participants' perceptions as to how they viewed the ability of TPGPs to

foster professional development; Bruce remarked:

> Teachers are attending the annual MCATA Conference
> (Mathematics Council of the Alberta Teachers' Association). As a
> matter of fact, there's a lot of professional growth that can occur in a
> coffee shop with your colleagues and you share ideas and so forth.
> And I think that's, you know that happens a lot. Teachers just don't
> attend the conference or get together because of the TPGPs; it would
> happen regardless.

Shelly

Shelly has been a mathematics high school teacher for twenty-seven years; she

left the classroom in 1996, two years before TPGPs became a contractual obligation. Her

career has involved many different responsibilities including teaching high school

students, recording a series of mathematics videotape through a local public service

television station, being a university sessional instructor, and working as an educational

consultant, to name a few. Shelly is currently an AISI co-ordinator for a large urban area

in Alberta. Her position as a senior examiner and as a curriculum developer for Alberta

Learning coincided with the writing of the new mathematics curriculum; Shelly was

involved, at a grassroots level, with the current changes to the new mathematics

curriculum. Shelly is well respected by her peers and is well-known in the province of

Alberta and Western Canada due to her role in professional development. It is because of

her knowledge and reputation that the school board that currently employs her offered her

an administrative position.

In Shelly's previous position with Alberta Learning, she was responsible for

writing an annual productivity plan rather than a TPGP. The plan involved "listing

exactly what it was that we were going to accomplish in that year. We had to have target

dates and almost a sign off to say that was done. Included in that was a personal part on

personal growth". It was not until she worked with her current board that she had to write

a TPGP. At our first meeting, Shelly explained:

> I have never had a growth plan but I have to do one now, and
> actually, I just got notice again that it's that time of year that we
> have to do a three-year plan on top of that. If the TPGP is anything
> like the three-year plan then it's not going to be a lot more than a
> check list of the things that you are going to be doing.... As soon as
> I wrote down..."finish thesis" on my three-year plan, then I mean
> that's staring me in my face and I just, you know that got done. I
> figure the TPGP would have that same effect. But is it "real", does it
> make PD more authentic? I don't know.

Carmen

Carmen worked as a high school mathematics teacher. When the research group

first met, Carmen was entering her first year as the mathematics department head at a

school located in a large urban school division. Carmen was responsible for teacher

higher academic mathematics classes, specifically Pure Math 30 and Math 31 (calculus

level mathematics) and International Baccalaureate Diploma Program students. During

her twenty-year teaching career, Carmen had been involved with curriculum and course

development and as an organiser for many mathematics conferences, as well as a leader

in professional development in her school division.

Carmen was familiar with TPGPs and was responsible for writing a TPGP during

her last two years of employment but she was unsure as to their effectiveness in showing

professional development. Carmen commented:

> Yeah, I have a teacher growth plan. But, we have achievement
> exams and diploma exams and isn't that a way for the province to

> measure that the curriculum is being taught? It's not supposed to be
> something as loose as a TPGP; how can you measure that? Why
> can't people just go to the in-services or PD and get a pat on the
> back. Why do they have to write a TPGP?

For Carmen, the government's desire to gain an "overall picture of…a school's performance" (Alberta Learning, 2000b) should be reflected in teachers' TPGPs and that other professional development activities should be considered as, "just what teachers normally do in their jobs…it's not a huge burden to do other activities like conferences" (Carmen).

Monique

Monique taught high school mathematics; she has been teaching in the suburb of a large urban area for twenty-six years. During the course of the research, Monique taught the Pure Math 30 courses – it was a course that she had taught course since the last curriculum change were implemented. Monique had been involved in a professional development group for the past five years. She explained that the group met on a monthly basis and offered an opportunity for teachers to

> discuss a definition of the curriculum and the details surrounding it
> and anything, any problems that we think that we are having. We
> meet regularly, we've shared tests. We've shared experiences.
> We've shared ideas and it has been a hugely supportive group.

Monique worked in an environment where she was the department head in a school that employed five mathematics teachers.

Monique was not sure of the status of her TPGP when the group's first meeting was held. When asked if she had completed one, she remarked, "You know I think, yes, yes I did. I did it". She stated that up until 1998, the teachers were responsible for

writing, "a three-pronged thing that we did as school people, as a requirement from our principal…. These things have been updated within the years". The plan the teachers submitted was similar to a TPGP in that goals had to be stated clearly and teachers had to meet with their principal to discuss the plan at the beginning of the school year. The TPGP process was not dissimilar, as Monique explained:

> Our, our professional growth plan at school is three levels. It's, it's you know professional growth, personal growth and school growth or curricular growth. Like I forget what they call it but, and it's sometimes it's hard to distinguish between those, those first two, you know professional things. But the personal one I've written down every year is balance. That's really important for me, balance between work and my home life and my children.

Chantal

Chantal has been teaching for eight years. She has taught in rural areas in Alberta as well as in a suburb of a large urban centre in Alberta. Chantal has never taught in what would be considered a regular classroom. Prior to her current teaching assignment of senior high mathematics and English language arts at a "storefront" school,[22] a school designed to offer high school courses to students who do not fit into mainstream classrooms, those who required course upgrading, or for those who could not fit a given course into their time schedule, Chantal taught at an alternative school designed to assist students to improve their social and academic skills with the goal of preparing students to return to a regular school setting.

Chantal had never written a TPGP. At our first meeting, she explained, "Where do we stand with the TPGPs? I've never done one, 'cause…we were never asked for one".

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[22] In Alberta, storefront schools are considered outreach schools.

During the same meeting, Chantal was astounded by what was constituted as professional development:

> So things like the math conference and that count, I can understand
> that. I have to take a diploma in English to keep my job with St.
> Albert Catholic and they are paying for half of the courses. I have to
> take eight in all. Is that PD too? Does that fit into a TPGP? It doesn't
> seem right that I should include courses that I need to take so that I
> can keep my job as part of a TPGP. Where do you draw the line?...
> I know that I would do the PD with or without a TPGP.

Blurred Vision

Sumara (2003) uses the notion of how literary experiences inform "personal and cultural commonplace for interpretation and re-interpretation" (p. 93). The same process occurs with interpretation of teaching artefacts such as TPGPs and curriculum documents; each individual who reads them interprets them based on their own past experiences. Each reading of the documents inevitably brings about different interpretations as well, because of reflections made, experiences, and discussions that shape and inform how the documents are used, as teachers use them (Lacan, 1973; Žižek, 1992a).

Not unlike their counterparts across Alberta, the teachers involved in this study agreed that professional development was a necessary component of teaching. All participants also agreed that they were not certain that a TPGP would be the vehicle by which subject appropriate professional development could be attained. These two ideals created the commonplace that acted as a point of departure for the research the participants embarked upon. It is interesting to note that professional development involved different components for the participants. Some believed that the provincial

achievement testing program should be used as the main catalyst for professional development, while others thought that professional development could and does occur any time teachers talk about what they teach and how they teach it.

By engaging in self reflection, the KSAs, and various curriculum documents authored by Alberta Learning in Alberta classrooms, teachers are confronted with a symbolic picture of their past, present, and future practices. Such reflection represents quintessential events for teachers, something they notice in the Other. It is only through such a construction of past teaching practice in current teaching practice that teachers' teaching evolves. The ramifications for teachers interpreting the KSAs and curriculum documents as a necessary part of their teaching, then, lies within the teaching history of the individual teacher. Teachers' histories act as latent (lost) objects that can be powerful drives for reconstructing their sense of efficacy as teachers – to become "better" teachers.

Bracher (1993) argues that desire is a vehicle through which one attempts to gain *jouissance* to, "attain the missing part of one's own being" (p. 41) by either possessing or becoming the *objet a*. According to Bracher, by possessing the *objet a*, an individual possesses, "a precious object or substance associated with the Real body" (p. 41). By taking the place of the *objet a*, the individual becomes what the construed Other wants one to be. Lacan (1991) argues that the *objet a* is at the centre of all drives as well as giving rise to fantasy. I suggest teachers' work to remove themselves from systems of representation that steal their *jouissance*.

> The following two chapters outline Lacanian concepts as well as a scaffolding of the four Lacanian discourses as they apply to teachers grappling with accessing personally meaningful professional development, while operating under increased pressure created by the presence of the corporate agenda and from the intensification of teacher work.

"Well, you're seeing what ain't there." Or what you wanted for yourself and never got. What we don't get, we see everywhere we look. What we won't let ourselves do, be, we refuse to tolerate in any other living soul.

Hyde (1999, p. 25)

When I examine myself and my methods of thought, I come to the conclusion that the gift of fantasy has meant more to me than my talent for absorbing knowledge"

Albert Einstein

CHAPTER 4

RECALCULATING PROFESSIONAL DEVELOPMENT: THE LACANIAN EXPONENTS

I did not make a conscious decision to use a Lacanian framework as my methodology for my dissertation. As a Master's student, my partner asked me to proof read his dissertation; after spending hours reading through the first chapter where he outlined the ambiguities within which teachers live and work, Lacan called to me as a means of investigating teacher identity. My first course involving Lacan was sparked after my life-changing decision to read his dissertation *The Gift of Failure* (Couture, 1999); I thought myself incredibly stupid at my inability to understand the Lacanian terminology he used so eloquently. At the same time, I felt, however, a beguiling drive to better understand Lacan. Up until that point, I had been investigating enactivism and post-structuralism as possibilities for a theoretical framework for my work, but a connection to the underlying principles eluded me – I could not embrace the concreteness

of the two, in comparison to my perceived openness the a psychoanalytical framework

afforded me.

During the following year and a half, I considered the work of Lacan and found it

spoke to the many issues mathematics teachers face in their efforts to work through

curriculum change and the advent of TPGPs. At its core, Lacan's writing offers me a

powerful critique exposing the tensions that have come to bear on the culture of teachers'

work. Lacan's work in psychoanalysis is centred around three psychic registries or

"orders": the order of the Real, the order of the Imaginary, and the Symbolic Order. In

what follows, I will investigate the three registers. In the discussion, I treat them as

separate entities knowing that the three registers are inextricably linked.

Dolar (1998) explains the relationship between Lacan's three psychic registries as

union where the Real (R) holds the Imaginary (I) and the Symbolic Orders (S) together as

follows in Figure 2:
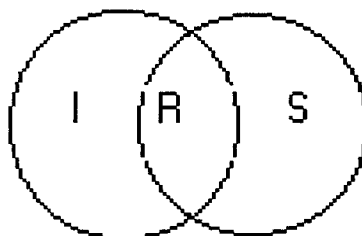
Figure 2. Dolar's two-dimensional Borromean knot: A visual representation of the Real,
the Imaginary, and the Symbolic (Dolar, 1998, p. 35).

Dolar uses Figure 2 to represent a "flattened two-dimensional Borromean knot" (p. 36)

(see Figure 3 for a three-dimensional model) to map the relationship between the three

discourses as they "underlie all human experience" (p. 35).

(http://seminare.snm-hgkz.ch/~maja/seminare/

poiesis4/nyblingo/lingo2.htm)
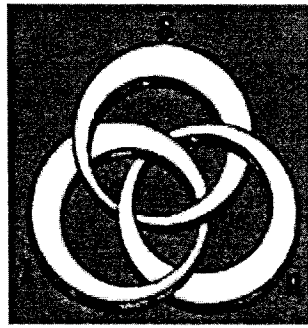
Figure 3. A three-dimensional Borromean knot: A visual representation of the Real, the Imaginary, and the Symbolic.

Griggs (as cited in Ronen, 2000) argues that the "Real appears in the Symbolic through a signifier cut off from its connections with the signifying chain, and hence meaning cannot occur" (p. 130). In this frame, the Real is a cut, an interception in the immediately given of the world. The Real, then, cannot be discovered as it lies beyond language; however, at the same time, the Real does not lack as it holds all it can contain. For Bracher (1999), the Real is "compromised of bodily states and affects.... [It] is present from birth and constitutes the foundation of our identity and the source [of] some of our most powerful intentions: our drives and fundamental fantasies" (p. 27). Žižek (2002b) describes the Real, "in its extreme violence as the price to be paid for peeling off the deceptive layers of reality" (5-6). Humans, inhabiting the gaps and the fissures of failed signifiers and ways of representing their world, struggle to assess the long-term ramifications of most of their actions. There are consequences such as continuing to underfund education, or implementing professional development initiatives while not offering any means to bringing about the desired outcomes. When the reality of our

actions is unmasked, the Real shows itself briefly and then re-masks ("behind the mask is only another mask" (Dunn, 1993, p. 175)) itself as the experts attempt to do damage control (to prepare for the last disaster). We continually encounter the Real, but it always remains beyond our ability to comprehend; it is continually present while, at the same time, is phantasmal (Bowie, 1991). The Real is not seized or controlled by the Symbolic or the Imaginary registers, but rather cohabits with them. More specifically, the Real works through the Imaginary by pointing to the incommensurabilities laid within the Symbolic. The Real represents an uncanny space between the possible and the impossible.

The Imaginary operates at the level of visual and spatial experiences. Consequently, it allows for misrecognition as the Imaginary is created by our image of self, our image of "who we are and what [we think] we are" (Fink, 1997, p. 24). Because we continually split subject from object, in normative perception, we always distance subject from object. The Imaginary experiences a moment of non-spectacularity when the distance between object and subject collapses, thereby, revealing the presence of the Real. The Imaginary exerts control over us in that it forms a bind between one's non-specular image and one's specular image in any given situation. Evans (1997) describes this tension as a "captivating/capturing power" that both "seduces" and "disables" individuals. The resulting tension imprisons the "subject in a series of static fixations" (p. 83). Bracher (1999) uses the example of spectatorship at athletic events to underscore our constant search for attaining and protecting our unified, coherent selves. Bracher explains that one reason we become spectators of athletics is due to our search to reaffirm

that, despite the crisis and attacks we undergo that cut our bodies into pieces,[23] we emerge physically unified.

Teachers place themselves in the role of spectators as well. For example, a teacher involved in other research I have undertaken placed himself in the position of "educational spectator". Paul considered himself to be an excellent teacher. According to him, his students "always achieve above the provincial average on the provincial achievement tests". If Paul's students did not reach a score above the provincial average, he blamed himself for his students' shortcomings; however, in years that his students excelled, Paul believed that it was the students' skills that had returned the above average test results. Although he was proud of his students, Paul felt no sense of responsibility for their success. For Paul, the students' bodies acted as "surrogate bodies" with which he could identify himself in order to intensify and enhance his feelings of self (Bracher, 1996, p. 38).

The Symbolic Order is the order of language and, as Evans (1997) reminds us, the Real and the Imaginary are dependent upon it for their existence. Sarup (1993) describes the Symbolic Order as that which sutures societal and social relations together and is, therefore, multifaceted. The language dimension of the Symbolic Order lies within the "signifiers". For Lacan, we enter the Symbolic Order as subjects who see the world of signs as both "other" and "self"; we can only think in an enfolded discursive space that is constantly out of joint. We become constrained by the topics we choose to present as it is the master signifiers we identify with that enslave our egos: "The ego attempts to satisfy

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[23] Lacan used the term "*le corps morcelé*": the body in pieces. When a baby sees herself in the mirror she has a complete vision of herself. The reflected image is in contrast with her actual experience of her world and she sees herself as fragmented. The difference between the ideal image the baby holds of herself and her fragmented experience constitutes lack: the body in pieces.

[its] narcissistic desire by defending and promoting those master signifiers that constitute its verbal core, the ego-ideal" (Bracher, 1999, p. 46).

The Ideal Ego and the ego-ideal both circulate within the fragmented bodies that construe themselves as subjects. It is important to understand the fundamental difference between the Ideal Ego and the ego-ideal and then investigate how both intertwine to bring forth a conflict of identity between "self" and Other. Lacan's Ideal Ego is the phantasmic image of perfection that the subject endeavours to imitate which is scaffolded by the Symbolic Order. The embodiment of all the KSAs is one figment, one idealised "spectre teacher" would represent the Ideal Ego. I recall a workshop on professional growth plans where two teachers, half in jest, created a satirical "teacher on steroids" who completed a growth plan that included attending workshops on technology infusion, how writing Individual Program Plan for students with special needs, and completing a Master's degree all in one year. I recall sharing the joke with the staff as the teachers of the school wrote their growth plan. Yet I still wonder: was not this attempt at humour a gesture hysteric (us) calling out to the (monstrous) Other – the Ideal Ego?[24] The Ideal Ego rises from the "mirror stage" when a subject begins to see herself in a mirror usually around the age of 6-18 months. When the subject sees her image in the mirror, she faces an idealised image that is whole and complete; it is one that begins to conflict (as she enters the Symbolic) with her "chaotic reality of (her) body between 6-18 months, thus setting up the logic of the imaginary's fantasy construction" which influence and shape the subject's psychic life from that moment on (Felluga, 2002, n.p.). The ego-ideal occurs when the subject looks at herself as if from an idealised position "to see her life as vain

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[24] In Chapter five, I explore the discourse of the Hysteric more fully.

and useless. The effect, then, is to invert her "normal" life, to see it as suddenly

repulsive" (Felluga 2002, n.p.): the split in identity occurs between self and Other.

Another participant in the research group, Monique, discussed how she viewed

parents' perceptions of schools and educators; she asserted:

> ...do you know that all of the surveys will tell you that the parent
> community of any particular school will tell you that they are highly
> impressed with what happens in that building. But as soon as you
> move away from those parents to those who are not directly
> connected to the school system, they lose interest. They don't care
> and they turn off. They're only mad about having to pay education
> taxes because they don't have kids in the system anymore.

As the researcher, I had brought up the topic of conversation and, therefore, had placed a

constraint on the topic to be discussed by the group. What continually emerged during

this section of the evening's work was that the teachers' perceptions of the parents'

perceptions became constant. The group agreed that they, as teachers, felt they had no

control – their ego-ideal (the embodiment of the perfect persona) was that they were

professionals and wanted to be treated as such, but the parental perceptions overrode their

feelings of self-worth.

It is Žižek's work on the inability of the Symbolic Order to contain the Real that I

draw much of the reading of the contradictions of TPGPs. The KSAs, TPGPs, and

curriculum documents all fall under the Symbolic Order. Returning to the technology

KSA, one can see how Lacan's notion of other and self are played out in that they mean

everything and nothing simultaneously: depending on the master signifiers that a teacher

ascribes to a given KSA, a teacher will be able to internalise the master signifiers and,

hence, act upon the directive or not. Teachers are able to read words that detail the KSA;

they then interpret them based on their master signifiers. Their interpretation may allow

them to achieve the KSA or it may impede their ability to do so. There must be a point where the intent and interpretation support one another. Take, for example, the KSA related to technology.

> Teachers apply a variety of technologies to meet students' learning needs:
>
> Teachers use teaching/learning resources such as the chalkboard, texts, computers and other auditory, print and visual media, and maintain an awareness of emerging technological resources. They keep abreast of advances in teaching/learning technologies and how they can be incorporated into instruction and learning. As new technologies prove useful and become available in schools, teachers develop their own and their students' proficiencies in using the technologies purposefully, which may include content presentation, delivery and research applications, as well as word processing, information management and record keeping.
>
> Teachers use electronic networks and other telecommunication media to enhance their own knowledge and abilities, and to communicate more effectively with others (Alberta Education, 1997, p. 6).

This KSA becomes the master signifier associated with a "good teacher" in that if you are able to perform the stated tasks, you are a "good teacher". Technology as a KSA sets up the following ironic paradox: most teachers believe teaching is about their students and that "good teachers" are able to engage their students in some way; it is all too often unlinked to the tasks they may be able to complete with the assistance of a technological tool. What is forgotten here is the need to question the relationship between technology as a productive force that can impact subjectivity profoundly – reconstructing the student-to-teacher relationship.

We must acknowledge, as Heidegger (1983) posits that *techne* stands as an instrumentality that can saturate our experiences of what it means to be human. As educators, we need to problematise the unreflective taking-up of technology in the

classroom. In Heidegger's view, that application of science to our everyday lives represents, "a protective undertaking of Being-in-the-world" that always stands at risk of being overrun by the artifices and artefacts of technology (Caputo, 2000, p. 166). There is nothing inherently negative in technology; however, the downside emerges when the faith in technology interventions reaches an "all encompassing momentum", what Heidegger refers to as the *Gestell* [enframing] of the *Bestand* ["standing reserve"]. The risk for society occurs when the world is seen increasingly as raw material for the consumption and production of more power and more influence. The sphere of human activity can all too easily become dominated by such practices as "ease of access" and "personal use". Caputo (2000) draws on the following example to illustrate Heidegger's concern: consider children accessing information readily using the *Encyclopaedia Britannica* at home rather than exploring the topic through classroom inquiry and discussion. The modality of learning has a profound impact on what is learned – the how becomes the what (p. 168). Because of the ease of cutting and pasting digitised portions of the *Encyclopaedia Britannica* into a research paper, for example, technology might come to teach implicitly is that learning is inherently easy and requires only minimal engagement with the topic as learning becomes the act of acquiring not utilising.

From Heidegger's concern with *techne*, more recently, Deleuze (1989) raises the specter of technology embodying the body; reconstructing the subject's sense of what it means to be a desiring body:

> The body is no longer the obstacle that separates thought from itself,
> that which it has to overcome to reach thinking. It is the contrary
> that which it plunges into in order to reach the unthought, that is life
> (p. 189).

In Deleuze and his "schizoanalysis"[25] we see the emergence of a new sensibility: bodies who see themselves without organs. These are bodies that are not the negations of physicality, but, rather, are extensions of all the artifices and artefacts that we come into contact with. In the assemblage of human artifices and artefacts that is a classroom using learning technologies (the Internet, digital video, word processing, etc.), it is important that teachers understand the complex forces and relationships that re-inscribe subjectivity and identity formation. In Deleuze (1989), we see the mechanical apparatuses that can impose themselves on students' and teachers' experiences of learning. I was reminded of this when I heard my co-workers confronted a student regarding an essay she plagiarised using Internet resources. She defended herself by saying:

> I know I copied some of this essay. I can't imagine writing anything without cutting and pasting stuff from the Internet. Isn't it better for me to be doing creative stuff like instead of wasting my time researching stuff and paraphrasing it when I can find it on the Internet? They (the authors) can do a better job at writing it than I can. It just seems as dumb as spending time in a library reading through books and getting my information from there.

What can be read into comment such as this student's resonates with what Bourdieu (1977) called the "anchors" that give form to the social field-structures such as *researching, paraphrasing, analysing,* and *synthesising.* These critical thinking strategies, the habitus[26] (Bourdieu, 1977) of the classrooms I grew up in as a high school student, are now being supplanted by hybrid learning tactics that are characterised by appropriation and the aesthetics of the simulacra – the reshifting fragments (Jameson, 1991).

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[25] In the context of this dissertation, "schizo" represents the Greek meaning of the word which is "to split". Typically, the term "schizo" is combined with other words of Greek origin in various scientific terms (Oxford English Dictionary) such as Deleuze has.

[26] This term can be described as the point where the things that you do with the tools that you have met; where and how you live with the tools that you have.

The teacher is always attempting to reach another place, another habitus (Bourdieu, 1977), but never able to reach a tangible end. In Lacanian terms, as a desired object, the KSA for technology never lacks as it can never be attained; however, there are always those who strive to attain the KSA and for those teachers, they truly believe that they have reached a concrete, stagnant end. As Deleuze (1989) reminds us "technology" is a filament of a schizophrenic experience in classrooms where both teachers and students as subjects engage in learning activities that fluctuate from nostalgia (getting to established truth in the past *as Other*) and hysteria (looking for new truths in the future *as Other*).

The KSAs remain an infinitude whose demand can never be satiated by teachers scrambling for professional development resources, money, and time. Teachers are "controlled" by the KSA that has fabricated a fabled reality encouraging conformity on the part of the teacher where expertise in technology is the focal point. Teachers continue striving to reach a level of proficiency in their use of technology, but technology itself always changes and the utopian end point always lies just out of reach. Furthermore, the KSA embodies the fantasy of control; one where for those teachers who are unable or unwilling to use technology or technological devices, their students will not be able to reach acceptable levels of achievement.

All that surrounds us and all that we are exposed to can also reinforce or threaten our body ego's sense of unity and coherence. The work teachers do, the environment in which we work, and the limitations and liberties we are given, all produce a sense of bodily well-being or insecurity and thus affect how teachers perform their jobs and relate to their colleagues (Bracher, 1996). How, then, does the *Ministerial Order #016/97*

threaten and/or interpolate teacher's ego? For Žižek (1992a), by viewing a given process through its reverse, the fact that ""events [take] precisely [a given] turn" couldn't but appear as uncanny" (p. 10). It is in this way that one can view issues of *méconnaissance* (misrecognition) that act as deceptions that are found in every effort as "true" representation. The participants in my research group continually confronted the paradoxical expectations placed on them by the government requirements for continuous self and school improvement. On numerous occasions members of the research group pointed to the (im)possible chiasms that constituted their professional development responsibilities and to the extent to which they engaged in writing their TPGPs. Two conversations were particularly poignant. Shelly indicated,

> I'm at the point where I want to write, "I don't want to grow any
> more." I want to catch my breath, I want to lay back. I'd like to put
> in my professional growth plan that I will work no more than 10
> hours a day and then I will go home and read a book.

Monique approached her professional development plan from a different perspective. She stated, "I keep this running journal so when it comes time for them to say, "OK what have you done" I am able to...go back and report it."

We view ourselves through a "logic by means of which one (mis)recognises oneself as the addressee of ideological interpellation" (Žižek, 1992a, p. 10). A resonate example of the play between the Imaginary and Symbolic Order is a survey of women in various countries identifying differences in their narcissistic impulses to look good. I am reminded of the Sunday, November 19, 2000 edition of the *Edmonton Journal* which presented results from a comparative international survey that explored differences in response to the question, "Why do people want to look good?" The five top reasons in descending order were:

> Wanting to feel good about themselves
> Making a good first impression
> Looking good for their partners
> Expressing individuality
> Attracting the opposite sex (Section E2)

The above list helps to underscore that there are different justifications as to why people look in the mirror as a means of achieving beauty. The list also acts as a means to evacuate the subject while, at the same time, it embodies the discourses by which people identify "self". According to Lacan, "relations between discourse and subject are two sided. The subject operates upon the discourse, and the discourse operates the subject" (Alcorn, 1994, p. 27). As my research group members shared their experiences, it became apparent that their sense of self existed outside of the master signifiers of "Teacher excellence" and "continuous improvement". Their sense of efficacy in terms of resisting foreclosure by the signifiers represents a cut from the Real. In this respect, teachers' sense of self is a contingency spoken from the Real, when asked to respond to the following question:

> Given the number of new programs being introduced by Alberta
> Learning (i.e. Second-Languages, K-3 Social Studies, Daily
> Physical Activity), supporting curriculum implementation is a key
> concern for teachers and school jurisdictions. In your view, what are
> the three top challenges facing teachers and school jurisdictions in
> terms of providing and supporting effective curriculum
> implementation over the next three years?

on the 2005 ATA Member Opinion Survey, one Professional Development Local Chairperson submitted the following concern:

> "Too much, too quickly" syndrome...several proposed changes are
> major and far-reaching (beyond classroom and into [the] whole
> school culture). In small schools, especially leadership for major
> changes, will have to be shared among very few individuals.
> Combined with the reality into, filtering expertise into, individual
> classrooms will take time.

For teachers in the above situation, feeling as though everything is happening at once and that they cannot cope with one more expectation being placed upon them, there is a rip or tear in the Symbolic that brings forth the Real where there is a tension between one's "imaginary identity" and one's "symbolic identity". Imaginary identity refers to the "image in which we can 'like' ourselves", whereas symbolic identity refers to the way in which we think other people (those outside of us) view us (Cotton, 2002, p. 5). The tension exists where teachers want to act as people who are able to accept their perceived limitations as a means of reconciling their imaginary identity, while at the same time, they must present themselves as able to cope with the intensification of teachers' work to the parents of children in their schools.

What ties the questionnaire to curriculum is the simple question, "What does the Other want from me?" It is through the question of desire where the Symbolic Order and the Imaginary meet to produce the *objet a* of the Real. The play between the questions, "What does the Ideal Ego of the Imaginary—the societal image of perfection (the Other) want from me?" and, "What am I for the ego-ideal of the Symbolic Order—what one internalizes (the other—the alter ego as moi)?" arise for both those looking in the mirror and the teacher. The mirror, for Melchior-Bonnet (2001), acts as a "matrix of the symbolic, [which] accompanies the human quest for identity" (p. 4).

The mirror stage figures prominently in Lacan's work. The mirror stage arose from an experiment[27] involving the reaction of a six-month old child and a chimpanzee reaction to their reflections in a mirror. The child was "fascinated with its reflection and jubilantly assumes it as its own image, whereas the chimpanzee quickly realizes that the

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[27] According to Evans (1997), the mirror experiment was first conducted by Henri Wallon in 1931, although Lacan credits Baldwin in *Ecrits*.

image loses interest in it" (Evans, 1997, p. 115). For Lacan, "the mirror stage represents a fundamental aspect of the structure of subjectivity...where the subject is permanently caught by his [sic] own image" (Evans, 1997, p. 115).

Once individuals are able to discern themselves as separate from their image, while at the same time remaining part of the image, the process of ego identification has begun. In other words, one is able to recognise themselves in the image. Two critical forms of identification exist that led to our formation of identity: imaginary identification and symbolic identification. Imaginary identification rests completely in the Imaginary order and results in, as Evans (1997) posits, the creation of the ego in the mirror stage. Remembering that Imaginary identification occurs through "identification with the image in which we appear likeable to ourselves" (Žižek, 1992b, p. 105). A key question for teachers to ask of the imaginary identification is, "For whom is the teacher carrying out their role?" In terms of teachers who identify themselves as successful because their students achieve above the provincial average on the Provincial Achievement Tests, we see a suturing of their sense of self strictly within the Symbolic; for these teachers, the master signifier "provincial standard" takes on a presence that occludes other possibilities for constructing their sense of efficacy. Other teachers who do not invest in the signifier "provincial standard" continue to reconstitute themselves in terms of the contingencies that are presented through the diverse learning needs of students in their classrooms. 1998 was the final year that I taught grade nine mathematics. After invigilating the mathematics Provincial Achievement Test, the grade nine teachers met to discuss the exam. A common thread through the conversation was that the test had not been a mathematics test, but, rather a reading comprehension test. More that fifty percent of the

questions involved long portions of written explanations. For other teachers who ask the

question influenced by Ohanian (1999), "What is the standard about standardized testing

when there is nothing standard about the standard?", the suturing of self is more in the

Imaginary.

Evans (1997) considers symbolic identification as a secondary identification as it

"partakes of the imaginary; it is only called 'symbolic' because it represents the

completion of the subject's passage into the symbolic order" (Evans, 1997, p. 81):

symbolic identification is only possible through the Imaginary. For Žižek (1992b),

symbolic identification refers to "identification with the very place *from where* we are

being observed, *from where* [his emphasis] we look at ourselves so that we appear to

ourselves likable, worthy of love (p. 105, author's emphasis). A critical question for

teachers becomes: "How do we view ourselves in our role?"

Curriculum documents, including TPGPs, and the discourses that produce them

are artefacts of the Symbolic Order as are the different ways people surveyed take up the

screen (discussed in the following section). Just as people surveyed have different self-

justifications for using mirrors, so too do the teachers I recently interviewed have

different self-justifications for looking at various government initiatives as a way to

reflect on their practice. For example, teachers recognise one side of TPGPs as signifiers

of affirmation of government enforced accountability and they overlook the other side of

them as also signifiers of denial – of the impossibility of reaching the government's

desired results.[28]

What images of teachers are embedded in curriculum changes and professional

growth initiatives that act to diminish our sense of identity? What occluded desires of the

big Other are evoked by the discourses of "business plans" and TPGPs? How can we as

teachers locate our *jouissance* in alternative readings of these documents? Known for

using a Lacanian lens for analysing of pop-culture, Žižek (2003) uses the film *Matrix*

Reloaded as a conduit to Lacan. Looking at the scientists and "experts" who are dealing

with the teaching in Alberta, we can ask the same questions that Žižek did. "What, then,

is the Matrix?" is substituted easily with "Who are the experts?" The experts are those

who are responsible for both creating and instituting curriculum documents such as the

Ministerial Order #016/97. The experts are the ones who are creating our perceived

reality of the situation; they are the virtual Symbolic Order – the Other. By choosing not

to resist the demand that their TPGPs align with jurisdiction goals, teachers are giving the

phallus to the Other, to the Symbolic Order. For example, I recently presented a

workshop dealing with appropriate uses of dealing with appropriate uses of computer in

the mathematics classroom and implications for their use at a mathematics conference;

there were only five people in attendance. At another session dealing with how to create

multiple choice questions that would better prepare students to write provincial

achievement tests and diploma exams, there were 55 people in the room. In their attempt

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[28] The way in which teachers receive the TPGPs is colored by their teacher organizations. Kerchner (1998) addressed the issue of how teacher unions do not support current government initiative such as TPGPs. Kerchner writes "current public policy is officially hostile to union organizations around quality (p. 5). For teacher organizations, the ideology remains that professional development should remain a proponent of the individual school's management concern rather than one that is supported wholeheartedly by the organizations.

to hold the phallus, teachers are more concerned with improving student's test scores rather than investigate pedagogical issues. I argue that when the delegates selected sessions to attend that they did not recognize desire in the topic I presented. Žižek explains, "the big Other pulls the strings; the subject doesn't speak, the subject "is spoken" by the symbolic structure...for all...of which the subject never fully dominates the effects of his acts; his activity is always something else than what he aimed at or anticipated."

The master signifiers, such as /excellence/ in teaching and /performance/, embedded in various curriculum documents connote a number of significations. For Žižek (1989),

> this does not imply that [it] is simply the 'richest' word, the word in which is condensed all the richness of meaning of the field it 'quilts' the *point de capiton* [master signifier or empty signifier] is rather the word which, *as a word*, on the level of the signifier itself, unifies a given field, constitutes its identity (p. 95).

The signifier continually shifts; just as meaning is made, it is changed. Žižek (1989) explains, "the measure of the success of the operation of 'quilting': the *capitonnage* is successful only in so far as it effaces its own traces" (p. 102). Transcendental signifiers uphold master signifiers: signifiers, such as history and truth, which claim to be an authority that cannot be proven or disproved.

The intersection between the Real, the Imaginary and the Symbolic is what produces the place of the object (*objet a* in Lacanian terms). An ambiguity arises from the *objet a*: the cause of desire (that which is produced because of language and one's unconscious) – "the other who is not really other, but a reflection and projection of the ego...and is totally inscribed in the Imaginary order" (Evans, 1997, pp. 132-133). It

represented an impossibility: an object that can never be attained (Evans, 1997). The

"objet a" (the little other), according to Evans (1997) is:

> has a place in discourse, it appears as a signifier, yet it resists the
> order of language....The 'objet a' has many meanings and (at the
> same time) none: it is what discourse is about, but it is also a void....
> It is what is produced by the very structure of language but which at
> the same time escapes this structure (p. 129).

The *objet a* sets into motion all our desires. For Evans (1997), "the drives do not

seek to attain the *object a*, but rather circle around it" (p. 125). The illusion of "circle

around it" illustrates that desire is not stagnate, and, therefore, it can never be attained or

stated as it is always changing in its effort to elude the subject. It is important to

acknowledge that the *objet a* can be a source of pleasure and manifests itself as a

pain/pleasure spectrum to become a source of anxiety. In terms of connecting the *objet a*

and the Other, the Other represents the object of our desires (Bracher, 1999); that elusive

"thing" that we can never attain. As I have illustrated in my research group reflections,

the Other demands the very thing itself cannot ever achieve; rather, it functions to

disavow teachers the possibility of their attaining the lost object and *jouissance* because

of an inherent failure in *jouissannce*; the signifier can never give you what you want. We

look to the Other for the answer – in a school situation, it is the teacher who writes her

TPGP but can only make it acceptable to the school administrators or vetting committee

by appropriating one school board goal and one school goal as part of her TPGP.

Jouissance is compromised of an interplay between the drive, desire, and demand.

Drive is a pull toward the *objet a*, the lost object; it defines our subjectivity. Desire arises

from what we think we want and it can never be filled by the *objet a*. Desire is on the side

of the Other – we can never attain it. For example, a having to create a TPGP is a

demand. That demand drive the teacher toward the Other, those who are responsible for accepting or rejecting the TPGP – the Other holds the desire. *Jouissance* is achieved when the teacher finds out whether or not her TPGP is accepted or rejected. *Jouissance* is fleeting and shortly after having achieved it, the teacher will turn to something else, some other desire that pulls her, drives her toward it.

Jouissannce can help us understand why teachers comply or reject curriculum change, accountability and government mandated initiatives in that those who comply with the various initiatives the demand is for them to write a TPGP, for example. Teachers who do not write a TPGP are not pulled to thfe demand to do so. In essence, they are writing their own narrative as they act against power and, in this way, find their own *jouissance*. Those who comply and write a TPGP are driven by the desire of the Other for them to do so.

Lacan describes the term Other as two separate entities: "other" (the little other) and "Other" (the big other). Evans (1997) describes the little other as that which is "inscribed in the order of the symbolic" (p. 133), whereas, for Salecl (1996):

> The Other is a symbolic structure in which the subject has always been
> embedded.... It forms the very frame structuring our perception of reality; its
> status is normative, it is a world of symbolic codes and rules regulating our
> psychic self-experience (p. 191).

The Other embodies social order and its rules. For Lacan, our need to belong within a society creates the Other. It is our desire to conform and to please, by giving society what we think it wants, so we can belong (Sharpe, 2001). Žižek (2001) describes the Other as objectivized knowledge; "the symbolic substance of our being, the virtual order that regulates intersubjective space" (p. 254). The Other is an impersonal set of rules and conventions, such as TPGPs and curriculum documents, that offer a coded role at the

symbolic level. There is a sense that the Other has the power to satisfy the needs

individuals have although this too is illusionary, the Other does not exist, since no one

person can fill the lack of desire once and for all. The symbolic import of our positions in

the social order do not match our imaginary one's regarding them. That's where the gap

lies.

At one of the research group's first meetings when discussing issues that

influence teacher professionalism, one participant, Shelly, viewed the issue of the lack of

parental trust in teachers as an issue that stood in the way of teachers being regarded as

professionals by parents and the general public as well. In Shelly's situation, the Other

(the parents') perceptions of teachers were that they were little more than "slackers".

Shelly commented:

> I taught my AP calculus class at 7:15 in the morning. That meant I
> was done my day at 2:00. But I did not leave my building at 2:00 in
> case I ran into parents and they'd be, "Oh ya sure, there's another
> teacher leaving early again. They must have a prep or something and
> they're leaving early". So guess what? I stay until everyone [the
> other teachers] leave.

Within a Lacanian (Lacan, 1978b) framework, Shelly asks what, "desire is the

desire of the Other" (p. 38), as one's desire is always based upon what we think the desire

of the Other is. "The signifier of the desire of the Other acts as the phallus", in Lacan's

view, points to a continual suspension of *jouissance* (Lacan, as cited in Evans, 1997, p.

142). The phallus is the empty void that is the locus of our own desire. It is "the thing"

that we think is going to give us absolute power. Take, for example, the teacher who

wishes to become a principal. She returns to university, receives a Master's Degree,

returns to her school, and is promoted to a vice-principalship. Although she has received

a promotion, the principal holds the phallus. If she is promoted to the principal's position,

it is now the Assistant Superintendent that holds the phallus. The phallus is always beyond our reach as it is always someone else who holds it. We look to others to be the phallus, just as the mother looks at her child as the object of her desire; "the child seeks to satisfy her desire by identifying with the...phallic mother" (Evans, 1997, p. 141). Evans posits, that castration, in Lacanian terminology, occurs when the father intrudes upon the relationship between the mother and child whereby the child realises that the phallic mother also desires the father.

In essence, we are all already castrated just as is the teacher turned vice-principal; her authority and power is a manifestation from others she is in contact with. By virtue of embodying the master signifier /vice-principal/ the teacher is (in the sense of "being") the vice-principal. Her respect, as a figure of authority, arises from the culturally bound signifiers associated with /vice-principal/, but really, she is already castrated as she is an "empty and powerless subject" (Salecl, 2002, p. 3).

"The phallus is a signifier without a signified" (Žižek, 1989, p. 97).[29] Kramer (2004) describes the importance of Žižek's concept of the missing signified as:

> The lack of the signified endows the text with mysterious depths of meaning—the very depths, so to speak, in which the signified has been lost. The opacity of the signifier marks the site of this loss and blocks all attempts to plumb the depths with certainty. As if on a perverse treasure map, the signifier is the spot that marks an X (p. 16).

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[29] The illusion of the phallus as a dominant signifier, resulting from *méconnaissance*, gives it a false power that constructs it as a privileged signifier. For Lacan (1977), the phallus "speaks in the Other, [is] designating by the Other the very locus evoked by the recourse to speech in any relation in which the Other intervenes" (p. 285). The phallus belongs to the Other, it eludes signification by the subject. In this respect, I am referring to the phallus as one that lies within the Imaginary. The phallus can be situated in all three psychic registers; as an imaginary phallus of *méconnaissance*, as the symbolic phallus of the social order (principle) and the Real Phallus (Θ) of impossibility. The phallus can then be construed in three separate ways.

Feeling that she is bound to stay in school beyond her assigned time because of the perceived optics her leaving "early", might cause Shelly to suppress her own desires to leave when her assigned time has lapsed. In this instance, parents (parental perception = the phallus) exert a Foucaultian form of panopticism[30] on Shelly and thus she conforms to the wishes of the Other – to the Other whom does not recognise its own desire. I am drawn to Foucault in terms of power relations, but remain consternated by the question that, if no one holds the phallus, how can anyone have the power? As Foucault explains, the locus of control is a manifestation of the external environment that operates within the internal everyday mechanisms of daily living that drives people to police themselves (Foucault, 1979). Because TPGPs are externally mandated and the teachers involved in this study believed that they would not respond to professional development activities any differently than they had before they were required to create TPGPs, for me, the choice to use Foucault to examine power relations, in this instance, was the only one I could make. For Foucault (1979), power exists in relations that are reciprocal and mutually linked. Foucault believes that:

> Our society is one not of spectacle, but of surveillance; under the surface of images, one invests bodies in depth; behind the great abstraction of exchange, there continues the meticulous, concrete training of useful forces; the circuits of communication are the supports of a centralization of knowledge (p. 217).

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[30] The English philosopher, Jeremy Bentham (1791) designed a new type of prison called a "panopticon;" a prison where the centre tower was able to view all individual towers but the occupants of the cells could not see each other nor watchers in the tower. Fiske (1993) describes the panopticon as a humane form of punishment that resulted in "correct training (p. 73). Because the prisoners did not know whether or not they were being watched at any given point in time, the prisoners would monitor themselves.

The Gaze

Within a Lacanian framework, individuals come to realise their identities from "within" and "without" as a result of interpreting the gaze of the Other (Melchior-Bonnet, 2001, p. 5). For Lacan, the dichotomy brings about alienation; we are not subjects we have created for ourselves; we are not unified wholes. We remain in a constant struggle with our drives and desires that act as "fragmenters" as we are torn to become beings who can morph according to what the Other desires us to be. Our struggle becomes how to present ourselves as unified when we can never attain a given specific goal. Returning to the KSA for technology, teachers at a conference where I recently made a presentation expressed their feelings of frustration as we discussed how changing technology impacted their success in implementing the ICT Program of Studies. One participant commented:

> I think that sometimes we are in this way over our heads.... The amount of changes that are happening are staggering. This year alone, we have a brand new software package for our administration and a brand new marks program for the teachers to use. Both of them keep track of students' schedules, demographics, lates, absences...you know, that kind of stuff. Now all the teachers need to input attendance data into the computer every day. It has taken two years for us to get all staff to use e-mail and now that we're just about there, things are changing yet again. I think that one of the major stumbling blocks is that teachers already have heavy workloads and they are busy trying to teach. That leaves less time for them to use computers, for them to learn to use computers, so that they can use them in their classrooms.

Teachers attempt to fulfil many roles at one time; they strive to be "good teachers" while adhering to all their contractual obligations. Which desire takes precedence? For Feldstein (1996), as individuals we believe we possess the ability to be unified even though it is not possible. Our subjectivity is but fictional (p. 151) as the subject is

culturally produced. As the research group participants grappled with their own personal views of teaching and how a pending teachers' strike would impact them and their ability to continue to plan for teaching as a result of the stipulations imposed by external forces, there was a sense of helplessness that coloured the evening's conversation:

> Bruce: When the strike begins, you relinquish your intellectual property to your district. So that was my point with the lesson plans and so forth. They own your lesson plans and such then one should not be

> Carmen: taking them home.

> Monique: What does the word strike mean? Strike means strike, we're striking this, we're stopping this. I mean, if you're going to go to the literal letter of the law.

> Carmen: And that means you leave your keys at school.

> Monique: That's right.

> Bruce: Your intellectual property, if you're creating lesson plans at home, you're creating their property and their property is off site so that's an issue. You should not be doing teacher work if you are on strike, but that goes against everything I know.

> Monique: I mean no one can control what you do in your own home but

> Carmen: No.

> Monique: I mean if we're going to be doing work, as this conversations implies, you have to stop it.

Feldstein (1996) explains that "in a culture of mercurial changes and rapid slippage between the terms of representation, contemporary critics use deconstructive tactics to emphasise how fictional identities coincide with themselves" (p. 151). The core self is not so easily changed since primary identifications are extremely resistant to change. As demonstrated in the exchange above, even though the participants knew the

constraints regarding what they could do as teachers during the teachers' strike, they remained torn as to how they would occupy their time away from work. In essence, with alterations in their teaching culture brought on by the strike, their teacher identities were greatly impacted.

As Alcorn (1994) reminds us, agency is only a temporary phenomenon. Circumstances can be created where teachers can explore change; however, assuring a teacher's sense of change regarding teaching practice, which led to change in teacher's identity is not a given. For Smith (as cited in Alcorn, 1994), "the subject is an entity constructed by contradictory ideologies and interpellations" and are formed by a "disordered history" (p. 30). Homeostasis can never been achieved between the "subject's constitution by ideology and the subject's potential for ideological resistance" (p. 30). Because we, as teachers, have had opportunities to investigate alternatives, we are touched by them even if the impact is not recognizable immediately; we become changed microscopically below the level of consciousness.

From a Lacanian perspective, we can never achieve the object of our desire as the desire we strive for only leads to another. Figure 4 (page 85) can be used as a means to represent the gaze. For Lacan, the gaze cannot be grasped as it belongs in the place of the Real. The gaze structures who we are as teachers; it confirms who we are. The screen is translucent; it allows us to imagine how others see us and for us to, in turn, imagine who we are; it returns your look back to you. Fantasy resides within the screen as it is formed by the perceived looks and desires of others as to how we want to be seen. The Gaze operates within al three psychic registers. Within the Symbolic Order the paper the TPGPs are written on, the words written on the pages, and the format that teachers

choose to organise their plans all work together within the Symbolic Order. It uses the Imaginary on both the part of the writer of the TPGP and the vetting team that approves the TPGP —the hope that this plan will actually create some form of meaningful professional development for the teacher. It also use the Real in that a disjuncture between the teacher's perceptions and the vetting team's perceptions are not the same.For teachers who are unable to enter the text of various curriculum documents, the text returns the gaze to the "looker" (the object is looking at the subject). In Alberta schools, there is a fantasy that if more money is put into curriculum documents and professional development that Alberta's students' test scores will climb. The knock of the Real is that, in Alberta, we have the lowest graduation rates in Canada (Statistics Canada, 2003). For me, a more accurate measure should be the ability of teachers to attain the numerous KSAs. This task remains elusive as there are too many to measure and they must be measured within the teaching context. There are so many forces at work within our schools that the Real (students, parents, accountability, day to day events and occurrences, to name a few) keep interrupting the possibility of teachers attaining all the KSAs.

Janet worked as a technology mentor for a large urban school board for two years before accepting a position as an assistant principal at an elementary school. She believed that if spaces were created for teachers to use technology in their classrooms that they would. Consequently, she spent a great deal of her time

> working with individual teachers helping them put together lessons
> and units that use technology, in meaningful ways. I like the

approach that David Jonassen[31] writes about. I feel teachers need to
have built in support structures that are not necessarily set for a
professional development day. I believe that teachers need access to
answers at the time that they are working through a problem; a lot of
times, I will help the teachers while they are teaching using the
technology. To me, this is the most effective professional
development that I can offer the teachers in my school.

For Janet, professional development meant "real-time" support in "real life" situations.

She explained that many teachers felt uncomfortable, at first, as they felt that they, "did

not have the skills to use computers in their teaching." Janet also felt that the teachers

subsumed that, because of her position as an administrator, she was evaluating their

classroom practice in terms of technology integration the teachers while them improve

their technology skills. She continued to recount, "the teachers felt hesitant about

approaching me at first; it was not until November or December that teachers started to

approach me without my asking them if they needed any help." Janet did agree that not

all teachers in her school used computers, but she realised that,

> not all teachers are at the same point in their careers. Some teachers
> have different needs than others. I have some first year teachers who
> are just trying to survive the year. They do not want to use
> computers. I have veteran teachers who will be retiring before the
> ICT Program of Studies will be implemented. I do believe though
> that all teachers must learn how to use computers no matter what
> point of their career they are at.

Janet believed that the most effective form of professional development is that which is

meaningful to individual teachers and that which meets their individual needs. Janet was

unable to focus on that which she could not see – the possibility that not all teachers at

her school embrace technological change. The distance between the subject and object

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[31] Here Janet refers to David Jonassen's work explored in his book Computers in the classroom: Mindtools for critical thinking. Jonassen believes that computers should only be used to teach elements of the curriculum when the concept cannot be adequately taught without the use of a computer. For Jonassen, the computer is only a teaching tool and should be used as such. Students should continue to construct their own knowledge, but this learning is enhanced by the use of a computer.

collapsed as, for Janet, teachers must, without question, become proficient in their use of technology.

Turning to my preliminary pilot study completed in 2000, Monique, described her views regarding TPGPs as follows:

> In this school we're expected to complete professional growth plans, but I can't remember when we did the last ones. I think it was a couple of years back. I believe, in terms of my teaching practice, that it is always important to reflect upon your teaching practice, on where you are in your practice, and what do you think that you are doing; but, I don't think that, at least for me, that you have to put it down on paper. I think that it works for some people who need to focus on what they are going to do for professional development, but it is not for me.

For Monique, the plans are of no value to her but they are for somebody else. She perceived herself to be a 'good teacher' who was already engaged in her professional growth, whereas there were other teachers who were not. Regardless of what is outlined in the TPGPs, Monique believed that only she knew what a 'good teacher' was and that TPGPs act as a 'prescription' for those struggling in their teaching practice. Subjectivity for Monique was found between the gap of what is unknown to her and what she thought she was forced to be by the TPGPs (Lacan, 1962).[32]

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[32] Seminar of December 12, 1962.

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The "perfect"
teacher as
constructed by
the math and
technology
programs of
studies and
the TPGPs.
(THE GAZE)

The TPGP
"looking."
(THE
LOOK)

Real   Imaginary   Symbolic
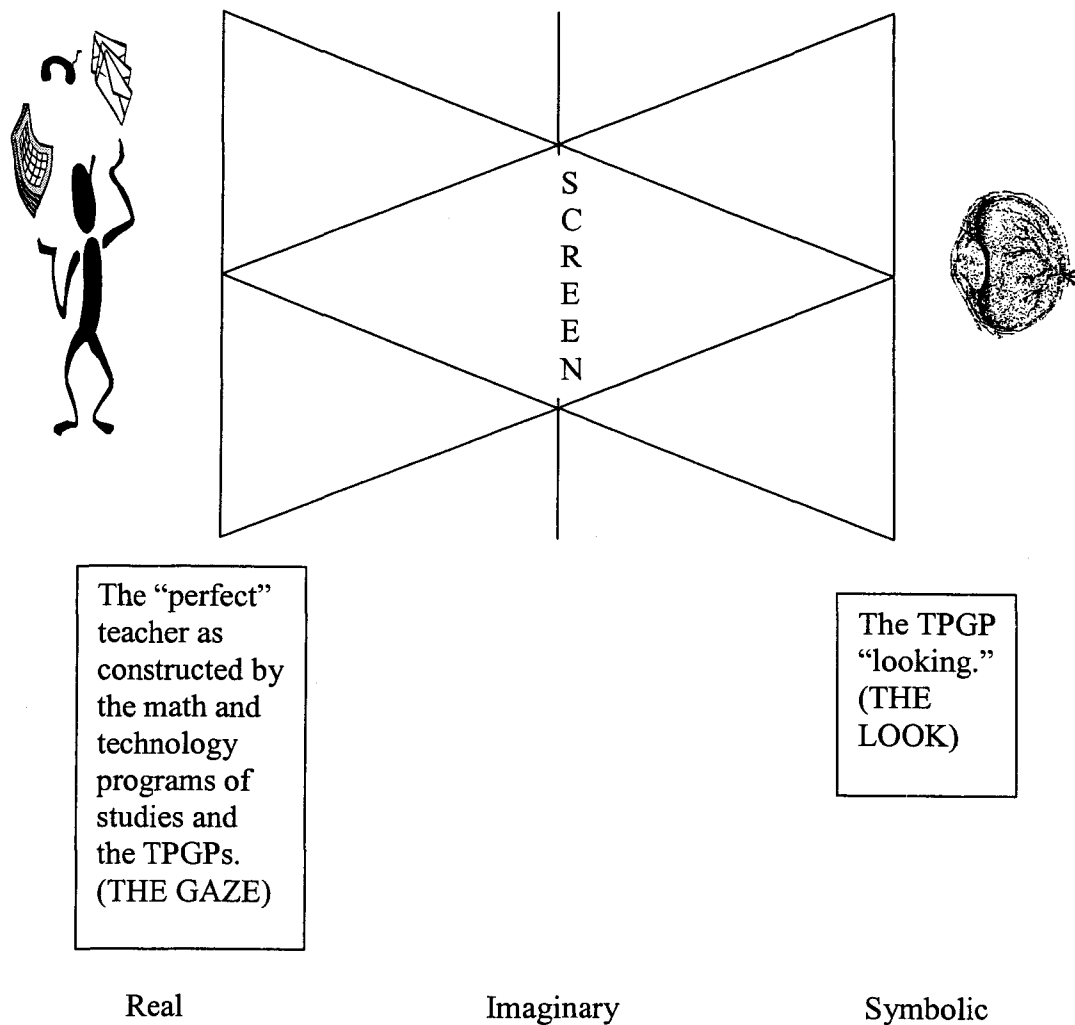
Figure 4. The Specular Economy of Curriculum Documents and TPGPs.
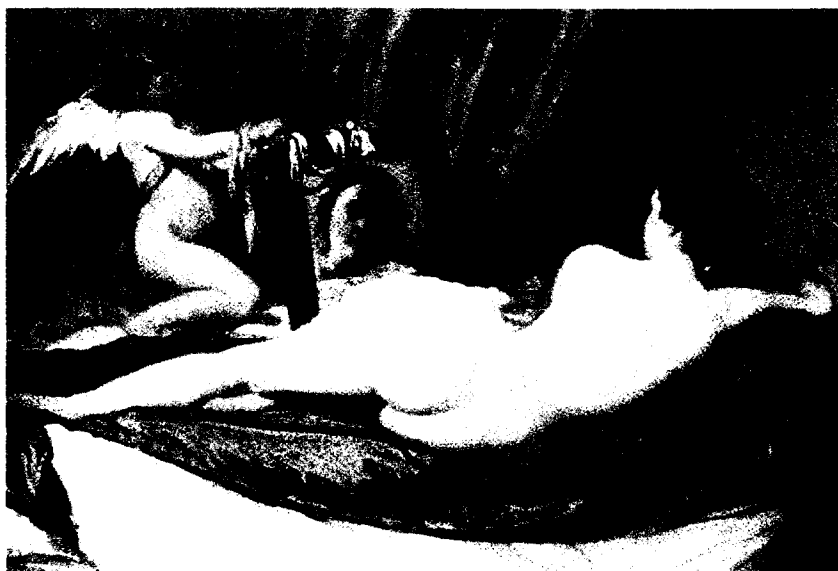
Figure 5. Venus at her Mirror (The Rokeby Venus) by Velázquez.

Figure 5 acts as a pictorial representation of Figure 4, Venus stands for the look of the

teacher and the screen becomes the mirror, as it is the mirror that returns the gaze to the

viewer. For Melchoir-Bonnet (2001), the mirror was viewed typically as "the emissary of

an exterior authority; it introduced a fictive presence, a promise of the other, of

conversation, of the world" (p. 141). Žižek (1998) writes that the look is informed by the

gaze, or, as I argue, an external authority that has no true "existence;" rather, authority is

embodied by its representatives. The look attempts to capture the gaze as its *objet a*, but

fails. The mirror returns the looking at the subject and her quest for her ego ideal; the

screen between the look of the teacher and the texts and meanings that curriculum

documents and TPGPs set forth. The cherub can be read as the "vanishing mediator" in

that it is a source of power having no material presence but is a necessity (Žižek, 1998).

The vanishing mediator can be replaced by a number of different subjects, such as a

group of teachers interpreting the TPGPs or the principal who collects and reads the

TPGP her individual teachers submit and then assists the teacher fulfilling her TPGP. The

vanishing mediator acts as a cloaked phallus: attempting to control or influence the

processes that form teachers' professional identities. It is a figure through which two

opposing terms are negated in the production of something new (Žižek, 1993); a reminant

of the vanishing mediator always remains. The vanishing mediator's power flows from

its non-presence: it is the judge not seen. Žižek (2002a) describes vanishing mediators as

something that:

> must disappear, become invisible, if the system is to maintain its
> consistency and coherence...where the gap separating the genesis of
> a structure from its self-reproduction is unbridgeable, the structure
> cannot "reflect into itself" the external conditions of its genesis since
> it is constituted by means of their repression of, of a trans-coding
> which effaces their, external, contingent character (p. 214).

Venus looks at herself in the mirror's culturally indoctrinated expectations where

language is infused in the act of looking; it "defines the aberrations and excesses" in the

world (Žižek, 1995). In the process of trying to work through the vanishing mediators, we

are caught by the structures of language. Teachers attempting to fulfil their responsibility

in honouring their teaching commitment are faced with a lack of resources and support.

The master signifiers set out by the ATA and Alberta Learning become (accountability,

quality teaching, to name a few), in effect, hollow. The vanishing mediator resides within

the master signifiers because, as Žižek (1992a) points out, a new set of symbolic and

imaginary discourses evolve that restore the role of the master signifier. This has led the

evolution of TPGPs to where we are now: teachers are trying to live in a world that has

no core or centre as the master signifier relates to something that is not there. Cupid also

represents a benign messenger delivering the benign authority of outside agencies such as

the ATA, Alberta Learning, and school administrators, all of whom aspire collectively to help teachers in their work.

The way Lacan describes the Other helps us to understand the way the Symbolic Order asks teachers to look at the structures that compel them to incorporate curriculum change into their teaching and to complete their TPGPs. No matter what changes teachers make in their practice, there is never an end point. One can compare this phenomenon to an ever-expanding balloon. Just when one believes they have attained the standards, the standards are changed through such events as curriculum change. Žižek (1993, 2003) uses the notion of the obscene supplement to examine the elusive nature of the standards where "the Law itself needs its obscene supplement; it is sustained by it, so it generates it" (p. 6). The obscene supplement is predicated on the notion that of the law (that which is obeyed); however, the law cannot be obeyed because it is impossible to obey. The obscene supplement acts as the very thing that you are valued for morphs into a road block that stops you from getting ahead. For teachers, there is no one central identifiable law; however, there exists a place of power in the regime created by Alberta Learning's *Ministerial Order #016/97* and curriculum documents.

Lacan (1978a) tells us the object of desire of the scopic drive is the gaze. It is the pre-existing view of the subject by the Symbolic Order that situates the subject in place, time, and desire. The gaze is an object of desire that is impossible to grasp, impossible to apprehend and within which it is impossible to find satisfaction. The gaze is not only the act of looking, nor is it only contained in what the subject looks at, but rather it exists in the gap of seeing and being seen. It is the moment of (mis)recognition of the looking subject and the object that is prepared by the Symbolic *to be looked at* (the gaze)

pinpointing the subject as a desiring being. It is the moment of "seeing myself within the KSAs" when the gaze is both present and absent. Lacan suggests that "the Other lacks" [L'Autre manque] (as cited in Dolar, 1994, p. 79). The lack of the Other is always covered by authority. Because we live with lack by filling it with authority, one aspect of my research is to investigate how the participants in this study fill their lack with respect to authority figures. The Other, as Lacan (1978a) posits, is created at, "the moment we are confronted with the Symbolic Order (p. 87)". Through a Lacanian sensibility, in reflecting upon the discourse, the subject identifies herself in terms of the Other, the Symbolic Order. The teacher emerges as a subject with identity through the structuring frame of the Symbolic Order.

Mathematics teachers in Alberta are influenced by the dynamic nature of the KSAs that demand teachers will always grow as professionals. The theoretical expectation of the KSAs will never equal teaching practice. Take, for instance, the technology KSA mentioned earlier. The stated range of use of chalk to computers to printed material leaves countless options for teachers. In terms of addressing what is the competent use of these technologies, the lack continues to grow overtime with every "technological" change. As one teacher commented at a TPGP workshop:

> If I read this KSA correctly, then by having a telephone in my classroom and using chalk and a chalk board, then I am competently using technology. Next year, if I get a white board, then I am keeping up with technological advances. I can make small changes every year to address this KSA.

Again, it is in the ambiguity of the KSAs where individual teachers invest their own subjectivity and self-surveillance.

In terms of outlining possibilities for teacher identity formation, this section raises far more questions than it is able to answer. In terms of the prospects for the new Alberta mathematics program and the professional growth of teachers, I remain ambivalent. As Phelan (1996) reminds me, under the new teacher supervision policy "the *teacher* is formulated as an object of control, rather than a knowing subject" (p. 332). What is highlighted here are a number of concerns. First, there are few resources available to teachers who are expected to implement the mathematics *ICT Program of Studies*. With limited professional development resources, these new programs will face a difficult future. Based on information from the Alberta Teachers' Association, professional development, albeit the contractual obligations of all teachers, is not a priority in any subject area, never mind mathematics.

The second area I believe warrants further research is the future of the new mathematics program and how teachers will attempt to cobble it together. With the overloading of the mathematics program due to the segregation of the *Program of Studies* into close to one hundred and fifty outcomes, most teachers have experienced a withering away of constructivist approaches once used. There is now no room for teachers to allow students to explore curriculum outcomes versus teacher delivered curriculum. How will the *ICT Program of Studies* outcomes fit in? How much instructional time will be required for the integration of the *ICT Program of Studies* into the mathematics classroom? What are the teacher orientations and attitudes towards learning that influence the use of technology in the mathematics classroom? Furthermore, there is no doubt that the ways in which teachers interpret and react to the curriculum documents drastically

influence the ways teachers embrace or reject the underlying philosophies embedded within the new documents.

To address the above issues, I will use Lacan's Four Discourses: those of the University, the Master, the Hysteric, and the Analyst. Lacan described the discourses as "*statute of statements* [where] discourse requires a choice among possible speeches according to the directive lines (orientation?) that interlocutors engaged in the discursive situation struggle to maintain" (Baldino and Cabral, n.d.). Discourse is not only the spoken word that is listened to by another person; the four discourses...should be understood as the four possible modalities under which a mismatch called "communication"" (Baldino and Cabral, n.d.) occurs. Discourse is a symbiotic event where a relationship is created between the speaker and the listener "in order to *sustain* a certain relation (the statute) of actions and utterances" (Baldino and Cabral, n.d.). It is through Lacan's four discourses that individual teacher's subjectivity is molded and come into existence and through which teachers create social bonds. Taking Throgmorton's (2003) notion of discourse related to planning and policy making as being overshadowed by "powerful memories, deep fears, passionate hopes, intense angers, and visionary dreams" (p. 128), the same can be said of discourses that take place around the implementation of policy documents such as programs of study and ministerial orders. Rather than offering a system for analyzing discourses, Lacan's Four Discourses allow us to understand how language is used to deal with sources of tensions in teachers' work. As will be demonstrated in the following chapter, the Four Discourses represent "four fundamental social effects: (1) governing/commanding [discourse of the University], (2) educating/indoctrinating [discourse of the Master], (3) desiring/ protesting [discourse of

the Hysteric], (4) analyzing/transforming/revolutionizing [discourse of the Analyst]"

(Bracher, 1993, p. 53).

He needed to know if Trevor would run up to the other boys to flaunt his new knowledge. To collect on any bets or tell any tales, which Reuben would not hear, only imagine from his second floor perch, his face flushing under the imagined words.

Hyde (1999, p. 13)

As stupid as this discourse of the unconscious is, it is responding to something that stems from the institution of the discourse of the master himself. What the hysteric wants is a master. She wants a master she can reign over.

Lacan, Seminar XVII

CHAPTER 5

LACAN'S FOUR DISCOURSES: LINKING OUR REFLECTIONS AS TEACHERS

Lacan's Four Discourses can be used to investigate how change affects teachers and, in turn, how these changes influence teachers' practices. For Lacan (1991) the four fundamental structures of discourses are of the University, of the Master, of the Hysteric, and of the Analyst. In each of the four discourses, the subject, is located in a position which underscores the failure of the pleasure principle (that which is the upper level). In this relationship, there are four different ways to avoid *jouissance* (that which is the lower level) (Verhaeghe, 2001, p. 25). The four structures produce social changes in the areas as follow:

1. The discourse of the University – where the goal is to educate and indoctrinate (Bracher, 1993, p. 53). The teacher's quest is to obtain knowledge for the sake of obtaining only more knowledge.

2. The discourse of the Master – where the goal is to govern and command (Bracher, 1993, p. 53). The teacher does not know what she wants but only knows that there is "something" that is being searched for.

3. The discourse of the Hysteric – where the goal is to desire and protest simultaneously (Bracher, 1993, p. 53). The teacher is overwhelmed by how she views what is teaching. The teacher feels neither anchored nor centred in her beliefs. The teacher feels a sense of helplessness in that nothing works because everything matters and everything works because nothing matters.

4. The discourse of the Analyst – where the goal is to analyse, transform, and revolutionise (Bracher, 1993, p. 53). It is the attempt to build a space where new master signifiers can be brought forth and open up new possibilities for *jouissance*.

It is through the Four Discourses that Lacan accounts for power and distinguishes various types of power depending on the position of those involved (Dolar, 1994) within the matrix of the various discourses as in demonstrated in Figure 6. The various discourses reflect the local sites of production and how they interact. All Four Discourses are steadfast insofar as their structures and positions; "it is the slippage of the master signifier, knowledge, *jouissance* and the split subject (always in that order) between each of these elements that constitutes which of the Four Discourses is occurring at any one time for a speaking or listening actor" (Gunder, 2005, p. 98).

For Lacan (1991), language is always a failure; therefore, we need to continually use language as a means of trying to understand each other. The following model allows

us to visualise the dynamics that occur through the production and receiving of texts and

discourses:

Agent (*a*) (knowledge) // Other (S1) (receiver)
Truth (*$*) (hidden assumption) Product (S2) (expectations)

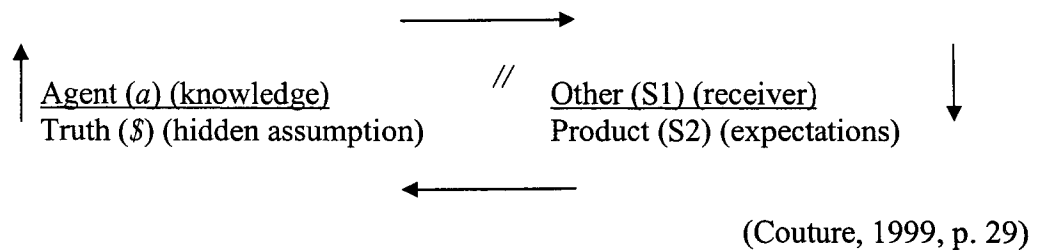<div align="right">(Couture, 1999, p. 29)</div>

Figure 6. Matrix of the Discourses.

Each site creates the possibility for the embodiment of desire in the signifiers and

for the constructions of realities. "The sign, composed of signifier and signified, finds its

natural state as being in flux" (Milovanovic, 1995, p. 7). As previously stated, it is

through the positioning and the roles occupied that various discourses have an effect. The

four factors coming into play are: knowledge; ideals; self-division; and, *jouissance* and

are the basis for the mapping of each discourse. Bracher (1993) describes the four major

factors that are involved with the production and receiving of text or discourses as:

> master signifiers (S_1), the network of signifiers or system of
> knowledge (S_2), the Real that is simultaneously excluded and
> produced by the system of knowledge and its master signifiers (*a*),
> and the divided subject (*$*), split between the identity to which it is
> interpellated (S_1) and the *plus-de-jouir* (*a*), the jouissance that it
> sacrifices in assuming that identity (p. 53).

Lacan (1977) depicts the Other as the master signifiers (S_1). They are reinforced by the

various social environments individuals are exposed to throughout their lives (Henry and

Milovanovic, 1996, p. 30, 206). For Verhaeghe (2001), S_1 is the first signified that must

be coupled with S_2 in order to create a "minimal linguistic structure" (p. 25).

Master signifiers exist in the Symbolic Order and allow us to "organize human relations in a creative way" (Lacan, 1978a, p. 20) so we may situate ourselves and envision our self worth. Who "holds" the master signifier for a teacher attempting to define what professional development is? In the discourse of the KSAs, there is a (mis)recognition of who "holds" the "true" definition of teacher competence; this acts as a barrier for teachers trying to assess their expertise defined within the various KSA descriptors and the ease with which teachers are able to make decisions regarding what professional development activities they need to engage in. This phenomenon is not articulated clearly in the words of Shelly at our first meeting. Shelly states, "If their [teachers'] PD isn't directly applicable, in their minds, to what they are doing in that classroom, then they look upon it as bullshit". If the teacher does not hold the master signifier, can she embody the signifier? As Bracher (1996) writes:

> We can see the significance of…identification with signifiers by observing the extent to which people will go to defend both the integrity of their identity-bearing "master" signifiers, as well as their own claim to these signifiers: most people become upset when someone denigrates one of their master signifiers (p. 2).

During one session, Shelly expressed her views and reluctance against embracing the TPGPs when she pointed out:

> I am tired of feeling like I always have to perform at this certain level. It's like what Alfie Kohn said about standardized testing, the outcome is that all you are ever doing is continually raising the bar, and we, as teachers, push our kids to meet the challenge. Just when they get there, the standards are raised again. The same thing is happening with these professional growth plans but now it is standards we have to meet that keep inching up. I just want a break and I wish that whoever sets these stupid "initiatives" looked at us as individual people rather than objects that can continually be made better.

For Shelly, the TPGPs are artefacts that do not allow for personal professional input. They are an externally imposed requirement that impede any true personal reflection of what a teacher truly believes to be needed in their professional lives; teachers, out of externally imposed sense of accountability, are obliged to write "something" in their TPGPs to placate a contractual obligation. In many instances, the reflection is disingenuous as some teachers "write something down so they can get the administrators off their backs" (Chantal). The master signifiers of the TPGPs do not allow for an accurate representation of what teachers conclude as areas of weakness.

Signifiers come into play and circulate within a given context. They influence the system through which we make relationship among the signifieds (the meanings). TPGPs and curriculum documents are informed by the master signifiers teachers bestow upon them by, first, the government and curriculum writers and, second, by those who read and interpret them. One must question: What are the master signifiers that dominate the *Ministerial Order #016/97* governing Alberta Learning's TPGPs and curriculum documents? What kinds of identifications, anxiety, desire, or enjoyment are elicited or supported by the master signifiers? In classrooms, as intensification pressures grow for teachers, what conflicts and harmony do these master signifiers produce? How does this conflict promote counterproductive behaviours? How does this harmony promote productive behaviour?

The ambiguity begins with making meaning of the master signifiers encompassed under the umbrella of "professional development". In my reading of TPGPs, the dominant master signifier is "professional growth". Conflicts arise through the province of Alberta's use of such supplemental signifiers as "evaluation", "supervision", and

"disciplinary action". In the course of the four-page TPGP document, the word evaluation is found twenty-three times and supervision is noted twelve times and disciplinary action four times. For many teachers, these words cause a great deal of strife and act as barriers towards the acceptance of their responsibility in embracing professional development as a serious endeavour. Teachers have responded to the TPGPs by questioning the intent of the *Ministerial Order #016/97* and have remained dubious as to how TPGPs will be used. As one teacher at an ATA workshop I presented in the fall of 1999 commented, "I just don't trust that my principal won't use the TPGP as a form of evaluation. I know that it says that the TPGPs are personal but the principal can come down really hard on us if we don't meet what we have said we are going to do. That makes the TPGP a tool for evaluation".

(S_2) represents any system of knowledge embedded within the discourse in use, be it the discourses of the University, Master, Hysteric or Analyst: a "battery of signifiers" (Lacan, 1991, p. 2) which we use in order to interpret discourses. Such knowledge of experience is needed to facilitate understanding of jargon specific to each discourse. As Bracher (1994) reminds us, it is knowledge that leads us to construct ourselves as subjects.

($\$$) denotes what is called the desiring subject and the speaking being; it is the divided subject where "something remains hidden" (Bracher, 1994). Teacher resistance to embracing the TPGPs creates a state of unrest where the master signifier of "professionalism" is cloaked, causing us to become strangers to ourselves where we can no longer recognise ourselves. Bracher (1994) explains that the divided subject can be framed as the "I" that I think about [can never adequately come to terms] with the "I" that

does the thinking; the urges and characteristics that I take to be mine are never exhaust or even adequately represent the forces that constitute my being and drive my thought and action" (p. 113). In other words, one cannot reconcile one's own subjectivity.

The (*a*) represents what is omitted, unsaid, what is not fully expressed and left incomplete; it is the "lost object" (Lacan, 1991, p. 3). The lost object is that part of our being that is omitted in discourse and can be filled by any given number of possibilities. We attempt to fill the gap, the "lack of being that causes all desire" (Bracher, 1994, p. 114).

Figure 6 (page 95) points to the ever present positioning and barring that occurs within each of the Four Discourses. That which is situated in the "numerator position" is more overt; it is the conscious that enters into the structure of the discourse. What is below the bar is that which is covert; it is the unconscious (Milovanovic, 1994). Verhaeghe (2001) summarises the act of "languaging" as a process that begins the moment words are transmitted to another. The result of receiving a message, in any form, transforms the receiver into the

> subject of language who tries to grasp an object beyond language, or more accurately, a condition beyond the separation between subject and object. This object represents the final term of desire itself; as it lies beyond the realm of the signifier and thus beyond the pleasure principles, it is irrevocably lost (p. 25-26).

The "agent" is the individual who is privileged by knowing what is to be produced regarding texts or discourses. It is at this point that the discourse begins. The term "other" is the subject who receives the texts or discourses. It is the other who attempts to decode and make sense of the texts or discourses but cannot. The product is the result of discourse; it is what the subject attempts to make sense of all she has read and has been

told. Truth is that which is repressed. It is what the agent would like to include in the text but cannot. Verhaeghe (2001) posits that, "the complete verbalization of truth is impossible, because primary repression keeps the original object outside the realm of language" (p. 22) which leads to the continuous desire for repetition of verbalization.

The upper and lower levels of the matrix are comprised of two disjunctions that figure prominently in the disruption of communication. The upper level represents the disjunction of impossibility whereas the lower contains inability. The two disjunctions are interconnected. Because the agent is non-existent and is driven by an attempt to reach the truth, "truth cannot be completely verbalized, with the result that the agent cannot transmit his desire to the other; hence a perfect communication with words is logically impossible" (Verhaeghe, 2001, p. 24). The lower level deals with the link between product and truth where the product and truth exist as separate entities as the agent is unable to communicate what she believes as the truth to the other; "the product can never match what lies at the position of the truth" (Verhaeghe, 2001, p. 24).

Through a quarter circle rotation of the positions, Lacan's Four Discourses (University (see Figure 7), Master (see Figure 8), Hysteric (see Figure 9), and Analyst (see Figure 10)) can be attained as the Four Discourses interact to create one another (Rabaté, 2001).

$$\underline{S_1} \xrightarrow{\hspace{2cm}} \underline{S_2}$$
$$\$ \qquad // \qquad a$$
$$\xleftarrow{\hspace{2cm}}$$

Figure 7. The Discourse of the University.

$$\frac{S_2}{S_1} \quad // \quad \frac{a}{\$}$$

Figure 8. The Discourse of the Master.

$$\frac{\$}{a} \quad // \quad \frac{S_1}{S_2}$$

Figure 9. The Discourse of the Hysteric.

$$\frac{a}{S_2} \quad // \quad \frac{\$}{S_1}$$

Figure 10. The Discourse of the Analyst.

Verhaeghe, (2001) among others, describes the Four Discourses as, "four different ways

for the subject to take a stance towards the failure of the pleasure principle"; (p. 25)

therefore, one always evades *jouissance*. Rabaté explains that the Four Discourses,

"allowed [Lacan] to account for the entire structure of the social link" (p. 22) whereby

each of the discourses represent a desire as well as the failure of that desire.

Discourse of the University

In the discourse of the University, the Other (a) receives information or speech. Bracher (1994) notes that we occupy this position even before we are born; we are the objects of desire of all those connected to our parents. We become who we are based on our interactions with those who hold knowledge. Utterances always refer to some field of knowledge; they purport to be justified by proofs and arguments "from the position of "neutral" knowledge" (Žižek, 1998, p. 78, author's emphasis).

The discourse of the University set up is as follows:

$$\frac{S_2}{S_1} \quad // \quad \frac{a}{\$}$$

Figure 7. Discourse of the University.

We are propelled to seek knowledge in our attempt to become social beings (Verhaeghe, 2001). In terms of professional growth plans, the KSAs, as open ended and subject to academic debate as to their meaning, become the ideal opening for the discourse of the University to saturate teachers' reflections about their practice. Applying the above model to the KSAs, it would translate to the following:

Agent (holds "truth", but ⟶ Other (teachers)
unwilling to reveal it)
Truth (concealed through // impossibility of achieving
unending questioning) ⟵ coherent identities through the
KSAs

Figure 11. Transposition of the KSAs to the Discourse of the University.

The KSAs stand for the body of knowledge, or "truth", (S2) by means of the list of descriptors that are presented to teachers. At first brush, the KSAs are presented as a concise description of what knowledge, skill, and attributes teachers must possess in order to be able to teach effectively.

Verhaeghe (2001) describes knowledge presented in the discourse of the University as "an accumulated, organized and transparent unity, coming straightforwardly to us from the textbooks" (p. 30). We need to see the KSAs as the equivalent of the "textbooks" described by Verhaeghe (2001): "the hidden truth is that it can only function if one has a guarantee for the master signifier [S1]" (p. 30). The guaranteed master signifiers presented in the KSAs are the descriptors that define what each of the nine KSAs represents, in terms of defining teacher quality. In this respect, the relationship between the o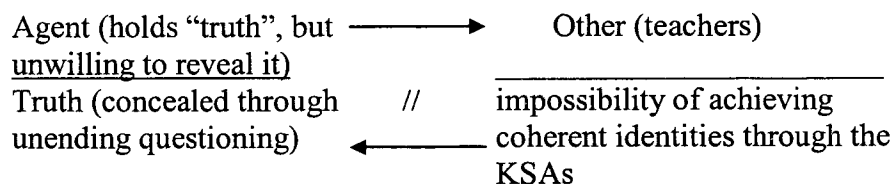bjet *a* and the signifying chain is structurally an impossible one. As the object is precisely that element, *Das Ding,* beyond the signifier, the signifying chain is the least appropriate agent for reaching it. As a result, the product of this discourse is an ever-increasing division of the subject (Verhaeghe, 2001, p. 31).

As teachers read the KSAs, they create a chain of signifiers which allow them to transfer the discourse of the University to their own discourse of the classroom teacher (the discourse of the Master) who distributes the discourse of the University's knowledge (S2). The discourse of the Master is masked and the "master signifiers (are) hidden beneath systemic knowledge" (Bracher, 1994, p. 117). It is in this respect that the teacher becomes alienated from her own knowledge and from any possibilities for *jouissance* in ways that build capacity for her in terms of meeting individual student's learning needs. Take, for instance, the technology KSAs presented on page 63 where teachers are

presented with the KSAs and then asked to consider ways they will improve themselves as a means of attaining the given KSA. It is in this regard that "knowledge" attempts to create "more knowledge".

In the discursive structure of the discourse of the University, there is little allowance for individualization of what teachers might frame as professional judgment. It is this limitation that allows for the educational system to be "a primary instance of the discourse of the University" (Bracher, 1994, p. 115). One major change disseminated through the last mathematics reform was the introduction of mathematics manipulatives beyond the elementary school grades. Much research (Kieren, Davis & Mason, 1996; Kieren, Pirie & Gordon-Calvert, 1999; NCTM, 2000; Simmt, 1999) investigating the use of mathematics manipulatives in the middle school years (grades seven through nine) and beyond, supports their use as a means of instruction and bringing abstract concepts to a concrete level as a means of assisting students better understand a multitude of mathematics concepts. Despite the discourse of the University supporting their use, teachers resist incorporating them into their teaching practice. Teachers continue to question the research laid out by the discourse of the University. Take, for example, a mathematics resource website entitled "Teacher2Teacher Discussion" available on the Math Forum website. Teachers and student teachers have posted numerous questions regarding the use of mathematics manipulatives at all grade levels (http://mathforum.org/t2t/thread.taco? thread=3678). The questioning, whether it be in this illustration or other scenarios, fuels the discourse of the University to re-research the use of mathematics manipulatives. Knowledge is never complete and always remains

inaccessible; it is only through a continual unpeeling of the master signifiers (S1) that we

can find truth.

Discourse of the Master

Within the educational context, the discourse of the Master the teacher takes on

the role of the provider, the one who replicates knowledge and she is the one "who

structures the field of school discourse with her [sic] authority" (Salecl, 1996, p. 33) as

the "subject is represented by the signifier for another signifier" (Žižek, 1998, p. 75).

Žižek explains the discourse of the Master as follows:

> The illusion of the gesture of the Master is the complete coincidence
> between the level of the enunciation (the subjective position from
> which I am speaking) and the level of the enunciated content, that is,
> what characterizes the Master is a speech-act that wholly absorbs
> me, in which "I am what I say", in short, a fully realized, self
> contained performative (p. 76).

The Master is presenting the subject with rearticulated, existing, knowledge (master

signifiers) while the subject attempts to access, to obey, the knowledge; the act of

obeying the knowledge, removes the possibility of subjectificvaztion . By promoting

"consciousness, synthesis, and self-equivalence" (Bracher, 1994, p. 117) the subject

assimilates the knowledge presented through the discourse of the Master.

For the discourse of the Master, there is no presupposed knowledge insofar as the

receiver is concerned; rather, it proclaims that knowledge can articulate itself.

Knowledge, Salecl argues, "does not belong to the Master but to those who obey" (1996,

p. 33). For Lacan, the discourse of the Master is found predominantly in political or

philosophical criticism (Bracher, 1993, p. 60) as specific forms of thinking and

communicating are promoted that are unique to the two fields. It is through such

privileging where certain master signifiers are exalted. Bracher (1994) cautions that one

must take into account not only the language of the discourse of the Master, but also the

"ways of thinking, feeling, desiring, and acting" (p. 118) associated with it. In effect, a

person "becomes" the discourse of the Master by embodying them in every sense.

Obeying is fundamental to the *Ministerial Order #016/97*. Teachers have been

mandated to comply with the order that states that teachers will complete a TPGP as part

of their professional obligation. Within this realm, the discourse of the Master can be

visualised as follows:

$$\begin{array}{ccc} & \longrightarrow & \\ S_1 & & S_2 \\ \$ & // & a \\ & \longleftarrow & \end{array}$$

Figure 8. The Discourse of the Master.

The master signifiers of "supervision", and "evaluation" act simultaneously as barriers to

teachers as they attempt to engage in professional development activities and as an

attempt to frame various descriptors associated with expectations regarding how teachers

are assessed in terms of professional development needs.

The master signifier (S1), in this case being the Ministerial Order #016/97 that

cannot be questioned, attempts to transmit the message to teachers of what exemplifies

good teaching and professional development. This act creates the illusion of a body of

knowledge held by the KSAs (S2), the other (*a*) that teachers can never fully understand

as they endeavour to integrate the expectations into their teaching practice through such

initiatives as workshops designed to help teachers formulate their TPGPs. Even though

teachers are in possession of the *Ministerial Order #016/97*, they are unable to subjectify

themselves within the context of the information contained within the four-page

document. They are unable to gain a sense of teacher identity (as incomplete beings)

because ideals portrayed in the *Ministerial Order #016/97* may contradict their ideals and

beliefs as to what professional development should be. Bracher (1994) attributes this

disjuncture to the subject's desire to be "myself to myself" (p. 112), a term Lacan coined

as "m'être à moi-même" (Lacan, 1991, p. 178, as cited in Bracher, 1994, p. 112) where

individuals are able to identify themselves as themselves while at the same time be

identified by others. The subject makes the choice whether or not to engage in the

professional development activities.

The discourse of the Master excludes the teacher from the position of Master;

however, there is an illusory possibility that the teacher might become trapped into

thinking that she is the Master. [33] For example, in the fall of 2002, I presented a series of

professional development seminars as a guest lecturer at the University of New

Brunswick and Saint Thomas University in Fredericton. One particular student became

very agitated because the province of New Brunswick was planning on mandating

professional growth plans for the province's teachers. The student commented, "I don't

know why I have to do any professional development. I am just finishing up my

Bachelor's degree and I know everything that I need to know so that I can teach. I just

don't need to learn any more!" In her attempt to position herself as the new-Master, this

student's comment underscores that transformation can never be sustained as:

> the discourse of the master…embodies [self-policing and] self-
> mastery—the attempt to constitute an autonomous ego, one whose
> identity is secure in a complete self-knowledge. This discourse is

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[33] As a cautionary note we must remain cognisant that the illusion of a "Master Teacher" is somewhat misleading; some teachers are not teachers and few are Masters. Any attempt to assert that one is a Master raises issues of power and authority.

characterized by the dominance of the master signifier—through which the subject sustains the illusion of self-identity, of being identical with his own signifier. In order to sustain this self-identity, this discourse excludes the unconscious—the knowledge that is not known—as this would jeopardize the ego's sense of certainty" (Newman, 2004, p. 303).

In this frame, teachers are invited to define their professionalism in terms of their willingness to self-police: to turn the Master's demand on themselves.

Because something remains hidden, the divided subject ($) is arrived at which is found in the position of "truth". The master is equally divided from the truth as is the subject resulting in a possible castration of the master. Such exposure usually means the Master death, and only if S1 is exposed because the master "is only a construct of the subject. The result of his impossible craving to be one and undivided through use of signifiers is a mere paradox: it ends with the ever-increasing production of object *a*, the lost object" (Verhaeghe, 2001, p. 26). The divided subject results from the inability of the master to recognise the root of her own desires; "the speaker [master]…has so successfully identified with her [sic] master signifiers that she [sic] actually believes herself [sic] to be whole, undivided self-identical" (Lacan, as cited in Bracher, 1994, p. 121).

The discourse of the Master allows for the unconscious fantasy and allows us, as teachers, to make connections to Master's knowledge so we might access the knowledge being offered us. Because teachers connect to the *Ministerial Order #016/97* in ways that are unique to the individual teacher, apprehension arises when their interpretations do not coincide with what they see as the inherent intention of the document; this represents the *objet a*. The individual teacher's interpretation of the *Ministerial Order #016/97* is denied. Professional development venues such as workshops do not allow teachers to

explore different interpretations of the *Ministerial Order #016/97;* therefore, those who

interpret the document, mainly the government, school districts, and school

administrators are placed in a position whereby they are the holders of knowledge. Their

position in the divided subject relationship ($) is elevated. Take, for example, Edmonton

Public's push toward increasing mathematics' teachers' knowledge of the subject in its

"purest form". Shelly commented:

> Edmonton Public has this policy that junior and senior high
> mathematics teachers must have a math background. So, people
> without a math background are supposed to be taking these courses
> that are being offered through the University. You should see the
> resentment that those people have. And, of course, the university
> profs being university profs, they treat it just like any other
> university course. So, here are these people, particularly the junior
> high guys, they haven't taken a math class for the last twenty-five
> years of high school. All of a sudden, they are expected to do this
> university level math.

Many scholars (D'Ambrosio, 1998; Sparks and Hirsh, 1997; Zaslavsky, 1995)

believe that mastery is necessary as a basis for "good teaching". I agree that mastery of

the skills by teacher is essential; but, who decides what teachers should master or how

that mastery is obtained? Can a teacher not learn while teaching? Is mastery only reached

by enrolling in university prescribed courses? For policy makers at Edmonton Public

Schools, the answer to my second question is that it is only through taking university

courses that teachers can learn the necessary skills to teach mathematics beyond the

elementary school level. The school division takes a position above the teachers by

mandating all mathematics teachers who teach in junior and senior high school classes

must hold a minor in mathematics. The district bars itself from these mathematics

teachers by limiting what courses teachers can take. Rather than allowing teachers to

complete courses in methodology and pedagogy, teachers are only allowed to enrol in

courses offered through the Faculty of Science; therefore, teachers receive credit for courses where mathematical knowledge and content are taught. Teachers select from courses such as: Calculus; Linear and Higher Algebra; Mathematics of Finance; Higher Arithmetic; Discrete Mathematics; Ring, Number, Group, Graph, Coding, and Set Theory' Geometry; Transformation and Differential Geometry; Theory of Interest, Complex and Real, and Functions of a Complex Variable; Topics in Mathematics; Boundary Value Problems; Mathematical Methods for Electrical Engineers; Vector Spaces and Modules; Groups and Fields; Differential and Partial Differential Equations; Geometry of Convex Sets; Projective and Inversive Geometries; Annuities and Life Insurance; Actuarial Mathematics; Mathematical Modeling; Mathematical Programming and Optimization; Numerical Methods; History of Mathematics; Combinatorics; Tensor and Numerical Analysis; Topology; and, Reading in Mathematics. Taking up Salecl's (1996) view of the discourse of the Master, it is Edmonton Public Schools, in this instance, that is the Master as it attempts to lay out what "attributes the teacher the role of a Master who structures the field of school discourse with its [sic] authority" should have (Salecl, 1996, p. 33).

Discourse of the Hysteric

Within the discourse of the hysteric, the divided subject, who takes up the position of dominance, is unable to identify with the master signifiers by which it might embody her own desires (Lacan, 1991). Lacan, as cited in Bracher (1994) describes the discourse of the Hysteric as, "the subject's refusal to embody—literally give its body over to—the master signifiers that constitute the subject positions that society, through

language, makes available to individuals" (p. 122). Žižek (1998) describes the rift as the result of, "the subject who is divided, traumatized, by what object she is for the Other: what role she plays in the Other's desire" (p. 79). The uniqueness of the discourse of the Hysteric is that the individual eliminates all possibilities of the master signifier being something else than what she interprets it to be. Rabaté (2001) explains this as the manifestation that, "one signifier will orient the quest and be taken for the whole truth, love for this key aspect will erase all the rest, in the hope of proving all theoreticians that they are wrong or lacking in some way" (p. 23).

The oppositional subjects who find themselves in the discourse of the Hysteric sometimes slip into a nihilistic or a fatalistic stance. Nothing new is offered as a solution to the question: what does the other want of me? At the other end of the spectrum, by being marginalised by the dominant signifiers the subject may "inadvertently recreate the dominant repressive order (hegemony)" (Milovanovic, 1995, p. 12). An example of this situation was an exemplary teacher who openly resisted writing a TPGP, claiming at a staff meeting, "this is a waste of time: what good can come out of this bullshit"? The teacher was cautioned by a colleague, "what good comes out of a lot of the paper shuffling we do? The point isn't that good will come of growth plans – we should just do it and get on with our lives". Bracher (1994) argues that such a demonstration of contempt, protest, and resistance is fundamental to the discourse of the Hysteric.

The discourse of the Hysteric is modelled as follows:

$$\xrightarrow{\hspace{2cm}}$$
$$\begin{array}{ccc} \math$ & // & S_1 \\ a & & S_2 \end{array}$$
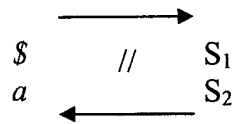$$\xleftarrow{\hspace{2cm}}$$

Figure 9. The Discourse of the Hysteric.

The hysteric expresses all that opposes the dominant order. In the case of the teacher

involved with accepting the *Ministerial Order #016/97* as a conduit to meaningful

professional development, it involves both those who question the validity of creating

TPGPs and those who resist writing one. The KSAs do not signify the life of teaching in

a classroom (that life is touched by the Real). The hysteric is a split person, she is not

"all" ($\math$$) (Facchini, 1999). Monique explains the tension she feels while attempting to

reconcile her preconceived views of the nature of mathematics teachers and how they

negotiate TPGPs. She indicates:

> I really think that you've got in this room, some real linear
> thinkers.... I'm guessing, because I don't know you guys all that
> well, but I'm saying that as a math teacher, just by the very nature of
> who we are, I can look down the line and I can see how I'm going to
> get there. To write it down on a piece of paper is nice; I'm doing
> that and I'm providing that need for someone else, my
> administration or whatever. But I think that I kind of knew this all
> along and that all I'm doing is writing down what I was planning to
> do in the first place because that's the nature of the way I think and
> the way I operate.... There's no doubt that when you make a list of
> things that you could do to improve your teaching practice, it's on
> there and you feel an obligation to check them off.

The discourse of the Hysteric seeks understanding and justification for the situation much

in the same way the teacher does as she tries to understand how the KSAs describe her

classroom situation. The hysteric is offered stereotypes by the master signifiers and labels

to explain her present condition (S_1). Limitations placed upon the teacher through the

KSAs and the *Ministerial Order #016/97* do not allow the teacher any expression of

resistance; the teacher is thus given no explanation for her condition, she feels left out

and unchanged. Consequently, the teacher has no body of knowledge with which to

identify (S_2). One teacher commented, "Well this document [*Ministerial Order #016/97*]

is just a bunch of crap. I am not going to write a TPGP based on KSAs. Have you looked

at some of them? It's crazy, how are we supposed to interpret them"? The bits of

information the teacher receives make her feel incomplete and not "all". Her

incompleteness is caused by the reproduction of the dominant body of knowledge that

makes the hysteric feel uneasy (*a*) (Facchini, 1999).

Discourse of the Analyst

The discourse of the analyst has the following structure:

$$\begin{array}{ccc} & \longrightarrow & \\ a & & \$ \\ S_2 & // & S_1 \\ & \longleftarrow & \end{array}$$
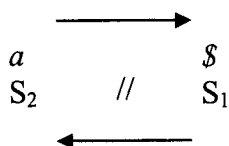
Figure 10. The Discourse of the Analyst.

In the discourse of the Analyst, the position of the agent is the cause of desire; the divided

subject is in the position of the Other (Bracher, 1993). The position of the agent is such

that it refuses to button-down "the truth" or the meaning of the master signifier. For

Verhaeghe (2001), the relationship between the "agent and the other is impossible,

because it turns the analyst into the cause of desire of the other, eliminating him as a

subject and reducing him to the mere residue...beyond the signifiers" (p. 31). Lacan

(1995) argued that one cannot truly be an analyst; he describes it as a discursive space

that one moves in and out of: occupying the position of the agent is fleeting.

According to Lacan, the discourse of the Analyst "offers the most effective means of achieving social change by countering the psychological tyranny exercised through language (as cited in Bracher, 1993, p. 68). The analysand repopulates the master signifiers with her own meaning. For example, "excellence" in terms of the KSAs may no longer signify high grades for students on provincial exams. Rather, "excellence" could signify a caring classroom where the teacher demonstrates patience and respect to all her students.

It is the silence appropriated by the discourse of the Analyst that makes it difficult to reconcile. As professional development leaders, Shelly, Carmen, and Chantal attempt to position themselves as facilitators while conducting workshops for fellow teachers. Their discussion of one training session is as follows:

> Shelly: I ran an Applied 20 workshop in the spring for two days last spring with [a larger school board]. I think that it was the best two days of in-servicing that I have ever done. Everybody was interested and it was just a great group of people so we spent a full day on curriculum, just immersed in it. By the time people left, they were saying that they had never been so prepared to teach a course.... On the last day, on the Friday, I set up learning stations and I think I had five of them. Each one lasted an hour and people moved from station to station to station and at each station there was something that was unique to Applied 20. So, I had a Geometre's Sketchpad; [one of the participants] was doing isometric drawing. Have you guys ever tried that stuff? I can't do it. We had such fun though because every school that is teaching Applied 20 has to buy those multi-linked cubes. It was so good. I could take that drawing and build that thing. You know me and geometry, I just hate it. But this was great, but man, go the other way! [Another participant]... she couldn't do them either. Well, I just thought that it was funny that I couldn't do it.... She was beside herself and she said. "How am I going to teach this course?" I said, "You'll teach the same way that I would. You'll have a kid do the drawing."

> Carmen: Either that or you do the drawing ahead of time and put it on the overhead.

> Chantal: I find that those are the best sessions that I give – when they are doing and I am not talking.

> Shelly: If you're just popping out the info, it's not going to work. We did an Applied 30 one also and we only had maybe ten people because two schools in [a school division] are offering it this year. But, again, we had just a hoot. I mean, that's a lovely course; I would love to teach that one.

For Shelly, allowing teachers to explore various activities and mathematics manipulatives creates a situation where the teachers must negotiate their own learning. As the teachers work with the materials, they learn new ways to use them and become more able to adapt the use of the mathematics manipulatives to other learning situations. One could; however, argue that because Shelly chose the activities for the teachers to investigate that she is the master controlling the outcomes of the workshop. I agree that the danger does exist and that we, as leaders of professional development activities, must be considered and addressed when creating spaces for in-servicing teachers. What must be kept in the forefront of our minds when choosing the investigation activities is their possibility for use beyond the intended use. Ultimately, the person responsible for the workshop must make choices as how to run the workshops; failure to do so would return us to the discourse of the Hysteric.

Shelly is able to move in and out of the discourse of the Analyst while she attempts unsuccessfully to use the manipulatives is underscored by her acceptance of this shortcoming and her ability to allow herself (the analyst) to learn from the workshop participants (the analysands). This scenario parallels what Verhaeghe (2001) describes regarding the analyst/teacher patient/learner dynamics. Verhaeghe states:

> knowledge must not be provided by the analyst, on the contrary, it is the analysand who has to produce knowledge, and the position of the teaching master becomes forbidden for the analyst during the

course of treatment. Instead of teaching, the analyst has to be taught. Instead of the analyst's signifiers, those of the patient fill the scene. The patient is the one who knows, only [she] doesn't know him/herself that [she] knows. Knowledge coming from an external source is merely an inhibiting factor (p. 38).

The most important thing I can add from my own observations is this: knowing it started from unremarkable circumstances should be a comfort to us all. Because it proves that you don't need much to change the entire world for the better. You start with the most ordinary ingredients. You can start with the world you've got.

Hyde (1999, p. 4)

CHAPTER 6
DEMANDING SUBJECTS

It was not a whimsical decision for me to choose action research as my methodology. Action research, for me, speaks of the multitude of layers within which teachers live their professional lives. Personal lives and experiences cannot be stripped away from the tissues that create the teachers who stand before their classrooms every day; that which touches teachers inevitably touches their students. It is not a coincidence that I opted to use quotes from the novel *Pay it Forward* by Catherine Ryan Hyde. For me, the plot of the novel speaks to me of the very essence of action research. Prior to our first meeting, participants were asked to view the film *Pay it Forward* if they had not already done so. During the research group's first meeting, we discussed what action research was and how it related to the film *Pay it Forward*. In the following section, I will describe action research in terms of the plot from the novel *Pay it Forward*.

Trevor McKinney, a grade seven student, is the main character of *Pay it Forward*. His social studies teacher, Reuben St. Clair (renamed Eugene Simonet in the Hollywood film version) gives his students a voluntary social studies assignment, which allotted the school year to complete. The assignment is to: "THINK OF AN IDEA FOR WORLD CHANGE, AND PUT IT INTO ACTION" (Hyde, 1999, p. 43). Trevor devises a scheme by which he pays three good deeds forward rather than the typical paying a favour back.

To explain the notion of "Paying Forward", Chris Chandler, the novel's diarist and newspaper reporter, draws three circles in the dirt. The three circles represent the three people that Trevor is going to pay a good deed forward. Those three people would then, in turn, pay a good deed forward to another three people each. The number of people would grow exponentially with every deed paid forward (i.e. 3, 9, 27, 81, 243, 729…). Initially, Trevor's scheme appears to fail; unbeknownst to Trevor, the scheme does grow into something more than he could ever have imagined. Chris becomes aware of the scheme "Paying it Forward" and embarks upon an investigation that leads him to Trevor. When Trevor is invited to meet the President of the United States, his final act of selflessness occurs in Washington, DC where he comes to the aid of a stranger being attacked by a gang of "skinheads", Trevor is stabbed and subsequently dies. In the days that follow, people from all parts of the world, having observed the effects of "paying it forward", come to his hometown to attend a memorial service.

Trevor's approach to his social studies assignment reflects many of the underlying principles of action research. His goal was to bring more kindness to the world through performing acts of kindness for three individual people – the common place for all Trevor's candidates was that he viewed them to be unhappy because of the lot they had been dealt in life. He wanted to improve the quality of their lives hoping that this would affect the way these three people were able to function on a day-to-day basis. Change, in the form of increasing acts of kindness, was the intended result of Trevor's self-assigned project. Trevor's project crossed three cultural boundaries. First, Trevor helped a down and out stranger with no job who slept in a dumpster. Second, Trevor aided an elderly woman who could no longer manage her gardening chores. Third, Trevor convinced a

young woman to not jump off the Golden Gate Bridge. Trevor's only remuneration – his

"pay back" – was for those that he helped to "pay it forward" to three other people. The

field of action research is characterised by its practitioners' intent to create a bridge

between theory and practice through the use of critical reflection; there is no foreseen

way to either create that, nor any promise that: 1) a connection can be created, or 2) the

quest is undertaken without any perceived personal reward. Richardson, (2002a) uses the

work of Klafki to describe three distinct components of educational action research. First,

> educational action research takes as its starting point educational
> practice itself. Second, it takes place in cooperation with the
> educational practice it aims to change [it is developed within the
> parameters of education, not externally].... Finally...it removes the
> division between researchers and subjects (n.p.).

Thus, no one involved in the action research process remains outside the research.

In Trevor's case, he had hoped that he was working toward what Kemmis and

McTaggart (1988) describe as research that focuses upon process and participation. The

work is carried out within a short timeframe where investigations bring forth some form

of result. When change in the three people Trevor had chosen to pay a debt forward to

was not immediate, Trevor believed that he had failed in his task. His failure to reach

such high expectations can be explained using the work of Van Manen (1997) who writes

of lived experience; for him, "a person cannot reflect on lived experience while living

through the process" (p. 10). Shelly commented on the importance of allowing

participants the time to assimilate what they had learned or discussed:

> I know that it [working with a group of mathematics teachers as part
> of a professional development group] hasn't been perfect, but man, I
> sure can see that the teachers I've worked with have really taken a
> hold of the AISI projects. I didn't think that it was going to happen
> when we first started working together but, given time for

> discussions and giving them the time to try things in their
> classrooms, I can sure see that it is making a difference.

Van Manen describes the process of reflection as an act that occurs once the researcher leaves the research. Reflection causes the participants to never fully return to whom they used to be. They are touched by an unseen force, the Lacanian Real; even though the participants might resist the change, there is always a minute portion of each participants' existence that will remain changed regardless of what the participant might believe or sense. Trevor's experiences with his "pay it forward scheme" touched those around him in ways that he could not fully understand. The Imaginary plays itself out through what Trevor believed should have happened. A disjuncture is created between the Imaginary and the Symbolic as he cannot observe any tangible change in those that he has paid a good deed forward to. It was only months after he put his plan into action that the results of his actions were observable.

Moving beyond the example of *Pay it Forward*, it is important to consider the epistemological underpinnings, the fundamental principles, of action research. Hopkins (1993) describes action research as an informal, qualitative, formative, interpretative, reflective, and experiential model of inquiry that is directed toward the improvement of practice as it pertains to a given experience. Drawing on Hopkins' work, action research creates spaces for a process of inquiry designed to empower all participants in the educational process (1993). After completing my first year of course work toward my doctoral work, I was hired by a small rural school board to implement an AISI program

in an "outreach school,"[34] to infuse technology into distance learning materials used for instruction, to write tutorials, to work with the staff to improve their technology skills and, in consultation with Tammy and Penny, the school's two teachers, to decide where technology could be best used to enhance student learning and to mentor the school's two teachers in using various types of technology and technology applications. I agreed to familiarise the teachers with the principles of action research so that the project would have some structure. When our study began, Tammy indicated that she had not used computers to do anything else but to read her e-mail. She believed that, "in an outreach school like ours, I don't think that we need to make computers a priority. Kids will learn the skills they need in their regular classrooms." Tammy also felt unable to help students should they encounter technology related problems. She stated, "I don't have a computer at home. I hardly know how to turn the computers at school on! I don't know what I'd do if a student got stuck". As the study continued, Tammy commented to the group:

> It's funny, every time that you would ask me to review something
> for her, I felt that rather than just reading the tutorials you were
> putting together that I wanted to make sure that they would work. I
> felt as though it was my duty to run them through. I can remember
> thinking; "I don't want to give the kids something to work on, if it
> has mistakes or holes in it".

As the AISI project continued, Tammy's negative experiences with computers began to shift. She attributed this to my presence and support during the six weeks duration of her contract. Tammy underscored this by explaining:

> I would be working at my desk and I would hear you giggling
> because you found something new that you did not know the

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[34] An "outreach school" is an alternative school designed to offer students and adults courses in an alternative educational environment. Typically, students do not fit into mainstream classrooms, require course upgrading, or cannot fit a given course into their time schedule. Outreach schools offers a wide variety of Alberta Learning approved courses in a flexible, student centered environment in standalone schools rather than within the walls of a regular school.

> computer could do. It was crazy...one day you downloaded "The
> Tigger Song" into a PowerPoint tutorial. I thought that was so neat; I
> just had to learn how to do that, so you showed me. All I could think
> was, "wow"! You had a different approach toward teaching Penny
> and myself how to use technology...we would talk about it and how
> we could vision technology integrated into the various modules.
> Then you would ask how we could help students accomplish the
> tasks.

At the end of the six-week contract, Tammy announced that she was going to buy a computer for home. She concluded that she realised, "how powerful a tool a computer can be. Using one makes it so easy to alter the distance learning materials to address the individual needs of our students." During a chance encounter with Tammy in March 2004, she mentioned that she had recently purchased a laptop computer and was the official PowerPoint presentation guru for her family at all celebratory gatherings. With respect to education, participants in action research typically include students, teachers, administrators, and university researchers. Thus, action research is "research undertaken by practitioners in order that they may improve their practices" (Corey, 1953, p. 141), and is designed to assist those who undertake it in creating areas for qualitative investigations in classroom situations, just as Tammy had integrated the use of technology into her teaching and everyday life.

Despite general agreement regarding the structure and trajectory of action research, it is important to note there are different understandings of intent in the discipline. Thus, I draw on the action research approaches informed by psychoanalysis, both of which ground the critical reflection of my research participants and me as we worked toward notions of subject appropriate "teacher professional development" and teacher identity.

Critical theory approaches to action research have been presented by such researchers as Carr and Kemmis (1986) and Tripp (1990) as a means of "moving beyond mere subjective interpretation to more generalizable understandings" (Richardson, 2002a, 32). From a critical theory stance, action research is directed towards achieving emancipation on a social and cultural level rather than emphasizing discrete improvement in individual professional practices (Grundy, 1982; Carr and Kemmis, 1986).

Tripp (1990) describes three approaches to action research informed by critical theory: technical action research, practical action research and socially critical action research. Technical action research views the "world as part of the social world" (Tripp, 1990, p. 160). It involves a "systemic inquiry that is collective, collaborative, self-reflective, critical and undertaken by participants in the inquiry" (McCutcheon and Jung 1990, p.148) where participants investigate if their practice is more meaningful. For Tammy, even though it was not apparent immediately, much of the AISI project that we were involved in could be classified as technical action research, as is demonstrated by her comment regarding wanting to ensure that all the tutorials were "user friendly" prior to allowing students to use them. Through practical action research, participants ask, "What can I do best and how best can I do it?" (Tripp, 1990, p. 160). A technical action research approach is aimed at devising appropriate strategies for dealing with events as they arise within the teaching situation. In Tammy's case, the questions became, "What can we do, as a team, to best fulfil our students' technology needs and how best can I ensure that that will happen?" From there, she was able to become involved in the project by working carefully through each tutorial, offering feedback, and, consequently, greatly increasing her personal abilities involving computers.

Practical action research regards the social world as part of the lived world. In practical action research; however, the social world is thought to be as it is (Tripp, 1990) and, thus, involves an element of hermeneutics as the approach is socially connected. Practical "action research aims to contribute both to the practical concerns of people in an immediate problematic situation and to the goals of social science by joint collaboration within a mutually acceptable ethical framework" (Rapoport 1970 p. 499) through sharing meaning and communication. Bruce, a research group participant, indicated his frustration with technical action research; at the end of a six-month project, he commented:

> I still feel like it was me who was driving the projects. I don't know
> if it was because I was overly sensitive to influencing the group or if
> I really did influence the group. I think that the truth lies somewhere
> in between the two ends of my feelings. It's strange, I feel empty
> about the whole process.

Although Bruce felt himself quite disengaged from the process, his participation, even though he felt might have been overly meddlesome, was nonetheless a necessary component of the research process. Since both technical and practical action research are enacted within the current classroom context or situation, practical action research should ask, "What should I do and why ought I do it?" (Tripp, 1990, p. 160; Gauthier, 1992). Thus, in practical action research, investigating questions of intent and reflecting on the collaborative process of interpretation become equally important as the intended outcomes of the research.

Distinct from technical and practical action research, socially critical action research "questions the social assumptions on which the technical and practical approaches are based" (Tripp, 1990, p. 160). According to Tripp, differences between the

real world and the social world are recognised; but, through critique, it is both the social

world and the way we understand it that is to be changed in order to promote

emancipation as well as to improve the social world. Socially critical action research is

> a form of collective self-reflective inquiry undertaken by
> participants in social situations in order to improve the rationality
> and justice of their own social or educational practices, as well as
> their understanding of these practices and the situations where these
> practices are carried out (Kemmis and McTaggart 1988, p. 5).

Questions arising in socially critical action research take up social implications that

empower "subordinate groups through shared understanding of the social construction of

reality" (Livingstone, 1987, p. 8). Socially critical action research promotes

emancipation, the questioning of social relations and liberation for participants.

Returning to Tammy's experiences with the action research project, I am

reminded of a statement of John Mason who said, "teaching takes place in time, learning

takes place over time" (John Mason, personal communication, June 6, 1999). Statements

such as Mason's suggest that learning, by students and teachers alike, occurs within the

context of situations and experiences. Mason's conjecture parallels that of Immanuel

Kant (1934) who asserted that a sequence of experiences does not add up to an

experience of that sequence (pp. 30-31). In other words, it is not enough to have had the

experience; we have to live the experience intensely for learning to take place. As Carr,

Jonassen, Litzinger, & Marra (1998) note, "knowledge is a product of activity, not a

process of acquisition" (p. 6).

A second approach to action research is drawn from post-structural theory and

deals with investigating how teachers live and act within the "ambiguities, conflicts and

tension that mark the classroom experience of teachers" (Elliott, 1991, p. 116). Given the

uncertain and conflicted ground of classroom teaching, the main tenet of this second

approach is to investigate "what to do" rather than finding answers to a given problem

(Richardson, 2002b). This approach instils tensions for both researchers and participants

alike. Bruce and Shelly indicated frequently the internal conflict they felt between

wanting to do what was best for teachers while at the same time respecting school

boards' policies. On the one hand, as Shelly noted, they "wanted to improve their

teaching by engaging in action research projects", while on the other hand they entered

into action research because they "were mandated to do so because of a school

administration based decision." Given these conflicting contexts, it is hardly surprising

that Bruce voiced ethical concerns over his role as facilitator

> I feel guilty that it always seems to be my agenda that dictates how
> the group is going to proceed. I feel that if I talk too much that my
> ideals are going to take over the project. How do I get the job done
> without influencing the group? The process I am involved with
> seems to fly in the face of everything that I have learned.

At the completion of the AISI project Tammy commented:

> I totally agree that the AISI projects influenced me far more than I
> had ever thought it would. I think that it is mostly because I was able
> to work with a teacher who became more of a mentor for me. It was
> strange because I was really resistant at first, but I really feel like
> you and the AISI project were really beneficial.

Research is not what is "done"; instead, it is "inextricably tied to the complex relations

that form various layers of community" including all in the immediate and outreaching

community (Sumara and Carson, 1997, p. xvii). It begins with what Sumara and Davis

(1997) term as a "commonplace"—a location from which interpretation can commence.

Sumara and Carson (1997) emphasise, "those who involve themselves in holistic focal

practice understand that one's evolving sense of identity and one's daily practices must

always be, in some way, interpreted in relation to one another" (p. vx); the embodiment of reflection on the part of the participants involved in the research can only be actualized when they more fully understand their own identity.

Lacan (1977) views identity as a person who is always incomplete and that identifications of a person are only captured as images. Lacan's basis for his thesis lies in the mirror stage: "We have only to understand the mirror stage *as an identification*, in the full sense that analysis gives to the term: namely, the transformation that takes place in the subject when [she] assumes an image" (p. 2). As we struggle to form our identity, we can only pass through never ending phases of metamorphosis: "our sense of identity and selfhood is open to change and revision. We are constantly re-making our selves" (Danvers, 2003, p. 55).

Rather than attempting to bridge the gap between theory and practice, I argue post-structural action research has moved to a melding of the two where teachers become who they are as a result of what they know and how they know. Furthermore, Sumara and Carson (1997) use Bateson's (1972; 1979) and Lovelock's (1979) complexity theory to illustrate how the interaction of people has impact beyond the immediate proximal connection; all interactions have ramifications throughout all environments. It is the nature of interactions to occur in a patterned fashion although not in a linear and predictable way. Sumara and Davis (1997) describe the process of interacting in research and teaching as an endeavour that cannot be reduced to, "simplistic reduction or interpretations" the boundaries between researcher and their research gradually become blurred (p. 301).

In my reading of Carson and Sumara (1997), I have come to understand that the interrogation of difficulty that gestures towards a post-modern irony is one that privileges the surprise: the uncanny touch of the Real (Lacan, 1978a). In action research, through the process of re-interrogating our difficulties as teachers, there is a possibility of never reaching a state of homeostasis and certainty. Researchers, and participants alike, live in a context of ambiguity where the end is always beyond reach. Rather than attaining a definitive concluding point, action research leads one to countless numbers of possibilities.

When viewing the differences between the opposing points of view of action research, I cannot view them as "a binary, but rather as an antinomy – an unresolved contradiction that exists between the two cultures where one point of view cannot exist without the other" (Judah, 2002) in a resolvable unified way. Because action research involves a reflective spiral practice, those involved must continually return beyond the starting point in order to reach another point. The recursive nature of action research as a means of inquiring what changes might occur are conceived through the "reflective/ constructive narrative layer that feeds whilst growing along the life it seeks to portray" (Brown and Jones, 2001, p. 69). The underlying assumption of action research is that a change will occur – this change can be a beneficial change, but there is a possibility that the changes might be detrimental. Psychoanalysis, in conjunction with action research, allows us to investigate ways in which the three psychic registers, the four Lacanian discourses, and our preconceived ideas work to either engage or disengage us in professional development. Brown and England (2004) interpret the work of Žižek in terms of "antagonisms"; where imperfections in people act as individual deficiencies that

must be "fixed". It is the unique imperfections of the individual teacher's practice that act as a catalyst for influencing the evolution of that particular teacher's future pedagogy.

My study draws on the work of Bracher (1999, 1993) who suggests teachers desire to be seen as effective and knowledgeable by their students. Teachers can never attain what they want to become as they are strangers to their own desires; desires always shift. By investigating teachers' shifting desires within the social-political contexts of intensification of their work, a post-structural action research possibility presents itself.[35] Action research, informed by a psychoanalytical critique, sees our subjectivity as an antinomy; that is to say one can never really be at home to oneself (Bracher, 1993). For Lacan, (1977) the root of desire is the interplay between who the person believes she is to them and how she believes the Other perceives her. The resultant ambiguity leaves the research participants grappling with what they "need to know what part [they are] being assumed to be playing" (Brown and Jones, 2001, p. 74). The following chapter will provide a way to link and transverse the previously outlined concepts presented in this dissertation by providing a new and synthetic subsets for the discourse of the Master and the discourse of the Hysteric.

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[35] Although Lacan was not a post-structuralist, "the *objet a* serves as the lining of the subject. The first objects that cause desire condition language and, as such, are *a priori*" (Ragland, 1996, p. 144). Ragland continues to explain that while in a grocery store, her daughter misinterprets the actions of others who are talking while looking at her. Her daughter explains, "I bet they're saying I'm cute" (p. 144). Ragland questions which gaze is at work in this situation: the one inside her daughter or the one outside. Ragland summarises that "in that moment [her daughter] *she* is the object-gaze: the *petit a* that Lacan called extimate, where inside and outside intersect" (p. 144, authors emphasis).

Man did not weave the web of life – [she] is merely a strand in it.
Whatever [she] does to the web, [she] does to [herself].

Chief Seattle, 1854

... it is the world of words that creates the world of things.

Jacques Lacan (1977, p. 65)

CHAPTER 7
THE DECLINE OF PROFESSIONAL GROWTH: IMPLICATIONS AND POSSIBILITIES FOR ALBERTA TEACHERS

I sit writing these last pages and reflect upon the journey that has brought me to this point in my life, the hours of reading and trying to understand the words of others, the words that, not too long ago, were foreign to me, the words that made me cringe at the prospects of never being able to reconcile them have now become familiar, I realise that I can never allow myself to come to believe that I have learned, that I could ever possibly learn, that all I will ever need to know is finally within my grasp, to do so would be inconceivable. I am, we all are, living proof that the lack can never be filled, can never be sated. I draw on the work of Brown and England (2004), who use the act of teachers who attempt to reconcile the successes and failures teachers are presented with as an unattainable task, to illustrate my point; I have replaced the word "teacher" with "researcher". As a researcher, I continue to find myself caught in a struggle where I am:

> negotiating [her] way to being a [researcher] there are multiple
> stories of what it is to be a [researcher] to be negotiated—stories that
> do not lend themselves to final resolution in relation to each other.
> Conceptions may be both idealistic and unachievable in themselves
> and impossible to reconcile with other conceptions (p. 71).

I am trapped in a constant search for knowledge, which situates me in the position of the Master. I am doomed to repeat the histories of those who have preceded me and those

who will follow me. As my mother and I sat in her apartment late one evening, we were

discussing this very issue. My mother said to me:

> Look around this room. Look at all the books that I have gathered
> throughout the years. I have always had to have books in my life. I
> want to know things and, when I forget things, I can always return to
> my books to refresh my memory. I know a lot of things, but I don't
> really know much about them. I just want to learn about those things
> that interest me but, even at 82 years old, I still want to be learning
> new things. I'll never be brilliant, but I'll never be dumb.

My mother's words spoke to me of the very essence of my being as a researcher, as the

person who I am know and as the person who I will become. I will never know

everything that I need to know to draw the conclusions that I will set forth in this chapter,

but I do know a little bit about the lives that the teachers involved in this research brought

to this study. I am humbled and am reminded that we cannot separate ourselves from the

path that was lain down for us from the moment that we are born. Our parents' desires

according to Fink (1997), become those that we, their offspring, aspire to attain: "Man's

[sic] desire is to be desired by the Other (here the parental Other)" (Lacan, as cited in

Fink, 1997).

Filaments of (Not) Knowing

Lacan brings forth the notion that there is no endpoint to any given process of

truth seeking. Rather, we can use Lacan to investigate ways in which our language

influences "our desires, our fears, our hidden motivations [that] govern our professional

practice" (Brown and England, 2004, p. 72).

Teachers can neither take responsibility for the world, nor ignore its demands.

"Education is the point at which we decide whether we love the world enough to take

responsibility for it" (Arendt, 1993, np). A psychoanalytical cultural critique teases out the (im)possibility of professional development in the current Alberta circumstance. There is both hope and desperation in an education project framed by Arendt. On the surface, the purpose of *Teacher Growth, Supervision and Evaluation Policy* (1998d) was to improve teaching practice in Alberta. The major curricular innovations in mathematics and information technology were to further the government's goal of bringing forward the agenda of cultivating a knowledge-based economy. Drawing on a psychoanalytic cultural critique, my research problematised the systematic effort to require more from teachers, while denying them the very tools they need to do their work. As Solway (2001) reminds us, much of educational reform of recent decades has transformed education into "a monumental chore" (p. 23) that has led to a growing "psychic dispossession" in teachers' lives.

My research draws on the Lacanian notion that the root of this symptom resides in the inability of teachers to work through the master signifiers that rob them of their *jouissance*. Teachers are caught in the nexus of desire by continually asking: *what can I do for the Other?* For Alberta teachers, it is difficult to reconcile so-called high standards for professional development against the reality that less than half a percent of school operating budgets in Alberta are devoted to professional development. My research explored how teachers' professional lives become an (im)possible space governed by government policies having no answer to the question: what does the Other want of me? This is the point of psychoanalytic critique: that the Other has no content, no centre or purpose. My research raises the question of how teachers might recover new spaces, new possibilities, and new forms of representation?

Passing Resistances and Ignorances

Authority figures must resist the temptation to infuse their own psychic investments in the master signifiers displayed by teachers. Teachers can find multiple locations for psychic investment in various cultural locations of teaching: positive feedback from students, high test scores on Provincial Achievement Tests, parental support, administrator validation, to name a few. It is imperative that to help teachers work through these choices, such groups as team leaders, department heads, principals, etc. must assist teachers in continually keeping open the (im)possibility of finding "truth" in any one cultural location and any one way.

After returning to the classroom in 2003, I presented a paper titled *Teacher Resistance to Professional Improvement: A Page from Lacan* at The Eighth Annual Conference on Psychoanalysis and Social Change Association for the Psychoanalysis of Culture and Society. One delegate asked me a question regarding the delicate nature of the teacher/principal relationship. At the conclusion of the session, I was driven to write the following:

> I recall my sense of relief and joy when I received a very positive evaluation from my first principal who I had huge respect for and thought of as a mentor. He had an amazing presence in the classroom and the hallways. After six months in the classroom he commented, "Your classroom control is exemplary: better than many people with five years of experience." He continually reminded me over the next two years about the importance of "being in charge" and "letting the students know what the limits are". But you know, it wasn't until eight years into my career when I visited another school's math program that I noticed how effective teaching was not necessarily only achieved through mechanisms of control. One class in particular opened my eyes. The students working in groups on math problems using manipulatives and reflective writing about problem solving approaches made me realize something profound: over time, I had gradually become a certain type of teacher that I did not fully recognize. I had become a surrogate of

my principal's preference for control and authority. I desired to be a
good teacher but I had only one lens to see myself through: the eyes
that I had been given by my mentor – my first principal.

My feelings are not unlike those I have heard countless time, from other teachers. My

circumstance can be read in several ways. First, there is the early equivalency of "good

teaching" with "classroom control". My demand "to be a good teacher" flows from my

desires to be recovered through reflection. I admit to being drawn to my first principal as

a mentor who, for me, represented "truth". But what were the attributes of this principal

(the Other) that allowed me to have such regard for him? What unknown desire drove the

demand, "I want to have the kind of "presence" he had?" In my identification with the

principal, I was simultaneously becoming a stranger to myself and more familiar with

myself. The principal was "an other" who seemed to hold the truth of the master signifier

"good teacher." It was not until eight years later that I realised I had become again, other

to myself. This time, the experience was seeing group learning activities that unhooked

"the truth" of "good teacher." The risk, of course, is that I might take up co-operative

learning as a new master signifier that would lock-down new "truths" that would exclude

and marginalise.

What my situation suggests is that a psychoanalytic critique of TPGPs and

professional development must embrace a passion for uncertainty and a willingness to

keep the signification of "exact knowledge" as open as possible. As teachers, we cannot

sacrifice our *jouissance* by foreclosing the question of what constitutes "good teaching"

with the demand of the Other. As Solway (2001) reminds us, "education was never meant

to be *efficient*. It was meant to be difficult, interesting, pleasurable, errant, prodigal in

every respect, transgressive, personal, lengthy, demanding, and hospitable – but not efficient" (p. 5).

Teaching and certainly "professional growth" need to be recognised as psychoanalysis does: as an impossible task that is made doable by virtue of our commitment to embrace our practical ignorance and the ineffability of our desire to know. Signifiers of "teacher competencies" and KSAs must be continually kept in play by avoiding any effort to lock these down in terms of specific meaning and technical checklists of teacher competencies. Teachers should avoid the Super Ego imperative to concretise the KSAs into more lists of competencies. It is worth noting that one of the key impulses to remove administrators from membership in the ATA and to create a separate Council of Education Executives (Recommendation 23, Alberta Commission on Learning, ATA, 2005) was an attempt to prescribe specific and measurable competencies for administrators. The creation of such separate administrative competencies, now framed as a *Leadership Quality Standard*, has recently emerged as a distinct possibility. The ATA, in an effort to preempt a narrowly defined list of KSAs for administrators, has proposed a wholistic and open-ended list of administrative KSAs (Thomas, 2005). Whether or not this approach is successful will be unknown until October 2005 when the Minister of Education is expected to determine the status of administrators. As desiring subjects and speaking beings, we, and our desires, are never fully expressed or complete.

Returning to the role of discourses and my situation, the principal views, or evaluates me and then presents my self back to me; it is what the principal sees (*a*). I then see myself as I was perceived by others (*$*) such as the principal. When I did not like what I later saw, I attempted to create a new master signifier (S1) that would take the

place of the old master signifiers. In my new situation, the analyst is able to gain a new body of knowledge from new master signifiers (S2) and explore with me what he is looking for in this "new approach" to teaching. Such work would be a positive part of professional reflection informed by a psychoanalytic cultural critique. It is in this direction that my work and reflections with other teachers is headed.

Issues related to shaping our practice were highlighted for me during the 1998 – 1999 school year. I was involved with in-servicing teachers in the area of technology integration across the curriculum. During the course of the workshops, teachers expressed that they felt as though they were having yet one more subject to teach. One teacher commented, "I am supposed to use a computer to teach science and I don't even know how to turn the computer on". At another workshop, where only three people attended the session, one teacher expressed her disillusionment at the fact that the school "only has eight computers of the twenty in working order. They are loaded with "Windows 3.1" and are useless. How am I supposed to infuse technology in a situation like this?" How do mathematics teachers' feelings of subordination caused by, what seems to be, the dominant discourses of technology integration influence their willingness to engage in technology in their classrooms? Action research, I was to realise after taking courses and through my subsequent reading, can contribute much to our understanding of the issues teachers face as they attempt to integrate technology into the curriculum. For me, the most powerful aspect of action research lies within its fundamental promise to foster reflection based on common everyday questions that break upon dominant master signifiers. It is in investigating the psychic investments of individual teachers in the /common places/ of their work that researchers can build a psychoanalytic cultural

critique. Rather than barraging teachers with mere technical questions and concerns about curriculum change, action research builds on collegial structures creating common cultural locations from which meaningful professional development can emerge (Handy, 1984). From this, one can begin to open new spaces for investigating issues pertinent to teachers involved in the research. Not only must they confront the Hysteric's questions of "best practices," they must critique the impulses and policies of the Master's invocation to get implementation of an impossible curriculum. The psychic impulses that pull and push teachers in contradictory directions remind us that reflective practice and critical self-examination, while well-intentioned modernist impulses, fail to ignore the psychological energy necessary to negotiate these conflictual discursive spaces. As I indicated earlier in Chapter 5, the modernist assumption that much action research rests upon is that teachers are coherent subjects who can reflect on common goals, transform and reconstitute schools, and teaching and learning environments (Elliot, 1991) and problematic. Critical reflection as a means to achieve *jouissance* as a reflective practitioner both suspends and tantalises the attainment of *object a* for teachers involved in this study.

As Žižek (1992b) illustrates, the point of seduction is to keep the lost object of *jouissance* moving back and forth from fantasy (the Imaginary) and the incommensurability of day-to-day life brought through cuts in the Real. For mathematics teachers in Alberta, the continual changes to curricula and the ratcheting up of surveillance of teaching practice achieves the Master's function of keeping the Real at bay, but in the Master's terms. In Alberta, it is the Master's injunction to reflect critically on ones practice as a teacher that finds what Žižek would describe as professional ethics

that are cleansed of values and "oughts" – a purely *ontological ethics* (Žižek, 2000, p. 41)

that is fed by the Master's acephalitic injunction to learn more, think more, reflect more.

What Žižek describes here is a pure Super Ego injunction that frames the Ideal Ego

which is always on the side of knowledge (Žižek, 2004, p. 41). *Knowledge* is the core of

Alberta Education, in its curriculum revisioning and surveillance of teachers' work. The

Super Ego expects nothing of you since, as Žižek (2004) reminds us, it has no passion or

intent – "it is just there if you come to it" (p. 41). The example Žižek uses is the warning

on cigarette packages: "Smoking can cause cancer." The result is the invocation: go

ahead and smoke if you really want to. All the Master wants is for you to come closer:

closer to the yawning maw of its own inherent stupidity cloaked by its relentless search

for knowledge. As a teacher spurned on to continually improve, only through the Master

can you resolve your *jouissance*. I am reminded of the frustrated teacher who scoffs at the

suggestion that she reflect on the reasons for her students low PAT scores, "Reflect on

this!" she responded as she mockingly showed her middle finger.

The Master Is Always on the Side of Knowledge

In the current context of Alberta's school system, many mathematics teachers

view professional development as an add-on to their extremely busy professional lives,

both due to the lack of support they are given and the relentless curriculum changes and

expectations embedded in the mathematics program. As indicated earlier, it is the

invocation of the Master that drives these teachers to comply with the Super Ego

injunction. In 2003, the Alberta Commission on Learning put forth three

recommendations, which directly impact teacher professional development:

Develop professional learning communities
13. Require every school to operate as a professional learning community dedicated to continuous improvement in students' achievement (p. 8).

Maintain and continually improve diploma exams[36]
58. Maintain and enhance diploma exams and include a balance of multiple choice and written response questions in all subject areas.

Expand professional development
73. Require all teachers to have targeted annual professional development plans that are directly linked to their schools' improvement plans (Alberta Learning, 2003b, p. 14).

It is not until one reads further into the document that the nuances become apparent.

While each recommendation is underscored by, what I feel are sound educational intent,

reality is not addressed.

13. In professional learning communities, teachers and school administrators continuously seek and share learning and then act on what they learn. The goal is high achievement and continuous improvement for all students no matter what their individual circumstances. The objective is to enhance their effectiveness as

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[36] It is important to note that, in the spring of 2004, Alberta Learning, announced that grade four students who did not meet the acceptable standard on the Grade 3 Provincial Achievement Tests would be required to demonstrate competency in literacy and numeracy after completing grade four. This increased call for policing, on the part of the government, was added to in the fall of 2004 when Alberta Learning announced sweeping changes to the grade twelve diploma exams where testing equating would be brought into the mathematics testing program.

> Each diploma examination is designed and developed according to a published blueprint that determines the makeup of an entire examination. Once it is established, the blueprint typically remains unchanged through the life of a particular program of studies so each examination administered is designed to a format that is consistent through time. The common set of items, mentioned earlier, is selected to be representative of the entire examination, and these items are embedded throughout each exam.

> When two groups of students write the same set of anchor items contained in two different forms of an examination, written at the same time or in different administrations, the following process occurs. The averages that the two groups attain on the common anchor set are compared. This tells us about the nature of the two populations of students. As a result, any differences seen in student performance on the unique items of the examinations would be due to differing item difficulties between the examinations, not differences in the populations writing. The relative examination difficulties are then determined. (http://www.education.gov.ab.ca/k%5F12/testing/diploma/consistentstandards.asp).

professionals and improve their students' learning. Key ingredients
for a successful learning community include:

Collaboration among teachers in planning instruction, observing
each other's classrooms, sharing feedback, and applying what they
have learned to new solutions to address students' needs (p. 66).

58. Teachers should be actively involved in the design and marking
of diploma examinations as part of their professional responsibilities
and as an important professional development activity (p. 102).

73. The Commission feels that…annual professional development
plans would be strengthened by…:
• Linking the plans to overall school and school system
improvement plans

In addition, school principals should be able to identify areas where
teachers should undertake further professional development in order
to improve and expand their skills (p. 122).

Each of the three recommendations illustrate the pervasiveness of the dissonance of the

Master: each recommendation seeking to impose control over teachers and their work.

As my study concludes, there is growing concern among mathematics educators

that the call for a review of the mathematics program will further undermine the

professional judgment of mathematics teachers. This concern is founded on two major

impulses behind the review. First, is to improve articulation between grade levels in

junior and senior high in order to better student access to post-secondary and career

pathways. The underlining supposition is a better mathematics education will garner

students a better education and, thus, better employment opportunities. Second, there is a

need for alignment with the Western and Northern Canadian Protocol (WNCP).

A Re-Doubling of the Master Signifier

The claw of the double-strophe, the double turn, for intensification for teachers is

the call for a comprehensive re-writing of the mathematics program of studies. The

double-strophe is the program of studies looking back in upon itself in an attempt to try to fix or change an illusive *some thing* (Feldstein, 1996). The WCP has been re-written as the WNCP where Alberta Education is providing leadership for its writing. The WNCP will then inform revisions to the *Kindergarten to Grade 12 WNCP Common Curriculum Framework for Mathematics*. A Publishers' Draft for the kindergarten through grade nine changes is due to be released during the summer of 2005 followed by the start of a review process for the grades ten through twelve curriculum in the fall of 2005 (Alberta Learning, 2005a). Changes in the following areas have been made to the kindergarten through grade nine curriculum:

- Teach fewer topics in more depth
- Group outcomes that address similar concepts
- Avoid outcomes that are not mathematical or addressed in other subjects
- Clarify outcome wording and provide a means allowing for better interpretation of the outcomes
- Increase focus on early numeracy
- Introduce pre-algebra earlier
- Introduce some topics later
- Ensure the flow of concept development
- Use terminology consistently (Alberta Learning, 2005b).

With each change to the existing mathematics program of studies, the discourse of the Master intensifies in its effort to morph itself into something that represents the truth. Yet teachers, students, and parents are increasingly frustrated by the continuous change to the mathematics program and its credibility in the eyes of post-secondary institutions. Despite assurances from the Learning Minister, Lyle Oberg, in 2003 that Applied Mathematics gained wide acceptance by universities, he was unable to compel these

institutions to do so.[37]

The discourse of the Master represents barred knowledge: that which the Master does not know. For example, the Master does not know what the society and future endeavors beyond school demand of the student. Dara, a former student of mine, offers an example of such lack of knowledge. Dara had been upgrading courses she had taken in high school so that she could attend university. In the two weeks prior to completing an Applied Math 30 course, she was informed that Applied Math 30 would no longer be accepted as part of the entrance requirements. Dara did not complete the course and will not be pursuing her post-secondary education in the fall.

The Schizo-Accents of the Discourses of the Master and Hysteric

The strategy embedded in the discourse of the Master is for signifiers to verify themselves within their own self-referential, yet vacuous, supplements. In this, two discourses of the Master are formed: the original discourse of the Master remains as such, but a new hyphenated (or accented) discourse of the Schizo-Master emerges. The originary discourse of the Master is the rigorous program of studies as it exist today. The emerging discourse of the Schizo-Master refers to the program of studies that will be implemented in the next few years. This emerging Schizo-Master, positioned as one that is responding to cries for change, remains an empty cipher.

The hyphenated discourses of the Schizo-Master and Schizo-Hysteric is consistent in the Lacanian scheme of the Four Discourses presented in Chapter 4. The

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[37] Reports from government officials indicated that when the Minister put pressure on universities to change their entrance requirements, one university president become quite agitated pointing out, "Doesn't the Minister know about the Universities Act"? (The Universities Act is a set of guidelines set out by each individual university.) (Internal information, ATA, July 17, 2005).

grid of four positions (University, Master, Hysteric and Analyst) are those that account for the entire structure of the social linkage (Rabaté, 2001, p. 22); however, Lacan believed that the discourses could be subdivided into, for example, the discourse of capitalism and the discourse of science. In the latter, Lacan envisioned science as the discourse that contains elements of the Hysteric, in terms of looking into the Other for gaining knowledge and truth and the University, for continually looking to unmask truth and knowledge. Lacan's Four Discourses as they stand today are "attempts to identify points of impossibility" in terms of the four dominant social relationships between agents and signifiers (Rabaté, 2001, p. 21). It is important to remember that the Four Discourses are positional points of reference that help us recognise the "place and function of the subject's enjoyment" as the role of the master signifiers and their circulation in the social network (Rabaté, 2001, p. 21).

Žižek's location of desire and enjoyment as the axis of the mechanism of control exercise the Super Ego's agency as an important insight and helps to clarify how Alberta teachers are kept off balance by a government with no coherent political agenda, except to diminish public education. The Conservative government, under Ralph Klein, has been successful by running against itself (Lisac, 2005). Klein consistently positions himself as the one who demonstrates the appearance of needing to know as he puts himself on the side of knowledge. On a number of topics, be it educational accountability, healthcare reform, gay marriage, Klein continually asks the public to admit, "Do we really know if this is the right way?" through the many public surveys the government has issued during the past decade. Of course, we don't know "the right way". Furthermore, Lisac (2005) outlines Klein's career as a Premier who brings the public to the face of the Real and

"others" himself as the one who does not know. He then promises to investigate

alternatives through selective public consultations and carefully orchestrating

commissions of inquiry. From health reform to auto insurance and gas deregulation, to

name but a few, Klein's success rests on his positioning himself on the side of

knowledge, as the one who wants to know. In this respect, he appears to be the *sinthome*

(the conduit for the *jouissance* of others) of the professional practitioner. It is no wonder,

then, that the Klein government's ability to destabilise the public education system and

teachers continues unabated.

The Double Strophe: The Lost Other

The discourse of the Hysteric places the subject asking, "What does the Other

want of me?" With recent changes in the WNCP, one can ask, "What does the WNCP

(the lost Other) want of us?" Unknown to most of the public, the WNCP is an empty

cypher, "a coded message addressed to the great Other which was supposed to confer on

it its true meaning" (Žižek, 1991, p. 205), where the Alberta government repeatedly

provides almost all the resources and support that sustains the effort of "humanizing"

curriculum across Alberta, British Columbia, Manitoba, Northwest Territories, Nunavut,

Saskatchewan and Yukon Territory. The current Alberta government representative

insists that the recent WNCP review of mathematics program attempts to attend to "gaps"

that are themselves created by the very same impulses of the Alberta government. A

vicious circle, an empty cipher, results; the consequence is that the current review of the

mathematics program is seeking *jouissance* in the (lost) Other. The (lost) Other is

synonymous with the "lost strophe" as the Alberta government cannot ask the Other because the government is the Other.

As Lacan suggests, the hysteric seeks *jouissance* in the Other, yet the double strophe created by the Alberta government in June 2005 does not bode well. Not only is there an enfolding of the discourses of the Master/Schizo-Master, the same is true of the discourses of the Hysteric where the discourse of the Schizo-Hysteric arises as a result of the double strophe.

Future Prospects

As the fall of 2005 opens up, the Alberta Commission on Learning recommendations have led to the creation of an increasingly attenuated discourse of the Master and discourse of the Hysteric that create discourses within discourses. Despite the introduction of ninety-eight recommendations of the Alberta Commission on Learning, including increases in funding, classroom conditions have not significantly improved in terms of class size and teacher preparation time. For example, in June 2005, the Edmonton Public Schools announced the elimination of sixty-five teaching positions, "due to declining enrolment and inflationary costs" (David Howell, The Edmonton Journal, B5). The school board indicated that, in some instances, there was only a minor increase in pupil-teacher ratios.

Teachers continue to report very stressful classroom conditions despite government

claims to conform.[38] With little improvement in professional development support and

resources for curriculum implementation, technology infusion: the crucial element of the

"new mathematics" program will yet again become the responsibility of teachers and

school divisions that can financially afford to support their teachers' professional

development activities. The Alberta Commission on Learning and the promise of the new

education minister, Gene Zwozdesky, to "de-stress" the system are invocations of the

discourses of the Master/Schizo-Master and the Schizo-Hysteric because the rhetoric of

the discourse of the Master and the discourse of the Hysteric are acknowledged but

nothing is objectively changing.

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[38] The 2004 ATA Member Opinion Survey noted that:
> Nearly 50 per cent of respondents described class size as somewhat (28 per cent) or significantly (21 per cent) worsened. No change was reported by 36 per cent of respondents while only 11 per cent reported degrees of improvement. Just over 55 per cent of respondents described class composition as somewhat (33 per cent) or significantly (22.5 per cent) worse. No change was reported by 34 per cent while only 7 per cent of respondents noted various degrees of improvement. In the critical area of special needs support, almost half of respondents described conditions as somewhat (30 per cent) or significantly (19.5 per cent) worse. No change was reported by 34 per cent of respondents and 13 per cent reported various degrees of improvement (Alberta Teachers' Association, n.p., 2005).

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