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A NEGOTIATED DIALOGUE: PROMOTING ACTION RESEARCH AS A CONSTRUCTIVIST REFORM IN A ZIMBABWEAN TEACHERS' COLLEGE

By

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ABSTRACT

A NEGOTIATED DIALOGUE:
PROMOTING ACTION RESEARCH AS A CONSTRUCTIVIST REFORM IN A ZIMBABWEAN TEACHERS' COLLEGE

By

James Martin Weiler

Lecturers in the Professional Studies section of Belvedere Technical Teachers' College have attempted to bring about constructivist changes by implementing action research as an approach for the student research project, Curriculum Depth Study (CDS). In the process of implementing the reform, a dialogue developed. The constructivist reform aimed at encouraging student teachers to deeply understand issues, develop their own ideas, and problem-solve to create new opportunities in classrooms.

With the limitations imposed on the education system by over century of racial hegemony, teachers' colleges are faced with a momentous challenge of educating teachers as critical thinkers capable of promoting constructivist thinking in their classrooms. When forces of the various theoretical perspectives are balanced, tensions arise. Stakeholders of various perspectives are challenged to articulate their point of view, negotiate, compromise, and keep sight of the crux of their point of view. Dialogue is the ideal process for the negotiation of the various theoretical perspectives. When one perspective becomes dominant, the checks and balances from other perspectives are eliminated. The agenda it promotes often becomes distorted and essential

issues do not get addressed. In Zimbabwe's history, theoretical perspectives have been rarely in balance thus, discouraging dialogue of substantial pedagogical issues. Currently, the state promotes an agenda of nation building at the expense of other perspectives and, in the end; the ideals of nation building have been compromised.

While the national context is not conducive to questioning and sharing diverse ideas, a dialogue of significant educational issues has developed at Belvedere Technical Teachers' College. An environment of questioning, sharing ideas, and negotiating for a compromise that satisfies all stakeholders has been growing.

Action research as an approach to the Curriculum Depth Study reflects an agenda of integrating action and reflection, dialoguing as a community, involving all participants, and engaging in constructivist thinking. Rather than being a dominating force, action research provides diverse ideas to question previously unchallenged perceptions of how research should be done. The success of the reform is not measured by the adherence to the ideals of action research in the students' CDS project; rather, the triumph is that lecturers were able to share their ideas and conceptual understandings of research. Through this dialogue, a common language to discuss expectations for students and their supervisors was created.

For Bjorna, you will always be with me.

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KEY TO TERMS AND ABBRVIATIONS

Curriculum Depth Study (CDS) – research project where students are to examine an aspect of their teaching
Tutor – college lecturer who advises particular students on the CDS
Supervisor – college lecturer who observes and evaluates students on teaching practice
Teaching Practice (TP) – student teaching experience
Post Agriculture Diploma in Education (PADE) – teaching diploma program for students with a diploma from an agricultural college
Lecturer – a college lecturer
Student – a student at a college
Pupil – a pupil at a secondary or primary school
Teacher – a teacher at a secondary or primary school
Mentor – school-based advisor (a teacher) to the student
Form I – first year of secondary school, equivalent to grade eight
Form II – second year of secondary school, equivalent to grade nine
Form III – third year of secondary school, equivalent to grade ten
Form IV – fourth year of secondary school, equivalent to grade eleven
Ordinary (O') level – British-based examinations that pupils take after Form IV
Forms V and VI – two additional years of secondary school primarily for pupils planning on attending university
Advanced (A') level – British-based examinations that pupils take after Form VI
College – an institution that offers diplomas upon graduation. They are considered a lower level of tertiary education than universities that offer degrees (bachelors and masters) upon graduation.

PS – Professional Studies
HOD – Head of Department
LIC – Lecturer in Charge
TP – Teaching Practice
CDS – Curriculum Depth Study
PADE – Post Agriculture Diploma in Education
BTTC – Belvedere Technical Teachers' College

CHAPTER 1
Introduction

This dissertation is the story of how some lecturers in the Professional Studies (PS) section of Belvedere Technical Teachers' College (BTTC) attempted to bring about constructivist changes in teaching and learning and the dialogue that ensued. In sharing the story of the reform at BTTC, I hope to contribute to a better understanding of ways to support and challenge students in reflective thinking as well as ways to improve students' own teaching and learning.

Constructivist reforms aim at encouraging student teachers to deeply understand issues, develop their own ideas, and problem-solve to create new opportunities in their classrooms. However, teachers in Zimbabwe have not been historically supported and challenged to promote critical and constructivist thinking. With the limitations imposed on the education system by over one hundred years of racial hegemony, teachers' colleges are faced with a momentous challenge of educating teachers to be critical thinkers capable of promoting constructivist thinking in their classrooms.

As protagonists in classrooms, teachers take leadership in making teaching and learning meaningful. The classroom, school or college is a forum for sharing and creating new ideas. When students are active in analyzing and evaluating information for a clear and relevant purpose, not only are they able to comprehend and retain more, but they are more apt to use the knowledge in productive ways. Duckworth (1996), Meier (1995), Dewey (1900), Freire (1970) and others describe strategies where students develop "their own way" of

working through problems where they develop the tools of looking at a problem in context, see themselves in relation to those realities, create ideas and theories for their understandings, as well as develop ideas to transform life circumstances.

The Curriculum Depth Study, a teaching practice research project, was an assignment that promoted constructivist thinking at BTTC. This reform was not without compromises, tensions and negotiations. In examining how this reform contributed to a dialogue at a teachers' college, I hope to reveal issues of what it means for a developing country like Zimbabwe to rethink teacher education in a way that promotes deep, reflective thinking.

Background

As a student at the University of California, Santa Cruz in 1986, I was given the assignment to "observe social change." I traveled to Zimbabwe for the field study. While I had no teaching experience, I was given the task of teaching economics and commerce to veterans of the liberation struggle. Zimbabwe was six years into independence, and a spirit of a new beginning hung in the air. While the students at Danhiko Secondary School would have preferred jobs or money, they took their opportunity of education seriously. Every day they worked hard at studying and preparing for examinations. They were not alone. The whole nation had turned to education and the system expanded at unprecedented levels.

In preparing to conduct research for my dissertation, I anticipated finding the liberation pedagogy that was being espoused in the 1980's being practiced.

In 1999, thirteen years later, I returned. The social change was apparent. The nation had changed international partners from the Socialist block to the West. Rather than professing a socialist agenda, the state was pursuing a free market approach to development. A year later, in 2000, state supported farm invasions signaled another change in development agendas.

While the country went through dramatic changes in the twenty-three years since independence, the education system does not look much different than what it did in 1980. This is not to suggest that education has been neglected in the national debate. On the contrary, education has been a priority for the state and the people of the country. Not only had many more primary and secondary schools been built, but there were many more colleges and universities. Expansion continued to dominate the dialogue revolving around education. Other, substantive pedagogical issues had not entered the national discussion.

The change towards the promotion of questioning and critical thinking was more subtle. I found a core of lecturers at Belvedere Technical Teachers' College (BTTC) who were thinking deeply about how to encourage student teachers to engage in constructivist thinking. They were not using the language of the liberation struggle, which included ideas of Paulo Freire, author of *Pedagogy of the Oppressed* (1970). Mr. B.J. Mahaka, Mr. S.B. Mazanhi, and Mr. J. Chandauka, leaders in the Professional Studies (PS) section at BTTC, were attempting to institute action research as the mode for a student teaching research project. While none of them had much experience with action research,

they believed that it could be used as a tool for students to reflect deeply about their practice and to take actions to improve the teaching and learning in their classrooms.

Action research marked a significant change in the college's approach to teacher education. Prior, to this the common belief was that research was a set of procedures for students to follow. However, the process was mystifying for most of the students and a number of the lecturers. With action research, the lecturer was no longer the guardian of all knowledge. Rather, his/her role became to support and challenge student teachers in thinking clearly and logically about issues and making improvements. The students were to develop their own answers and ways of thinking.

Overview

Because teaching and learning involves a dialectic process, this dissertation does not follow the traditional approach of building a single argument within a five-chapter linear structure. My research spanned over three and half years, and I include various issues of attempting to institute reforms that lead to meaningful teaching and learning. I begin each chapter by posing questions. These are questions for further thinking rather than for answering. The dialectic methodology for the dissertation reflects the dialectics involved in the study of teaching and learning.

Zimbabwe's history demonstrates what happens when a particular theoretical perspective expands to the point where the agenda being propagated no longer reflects its ideals, that is, it becomes corrupt. Chapter two examines

different stakeholders' perspectives in the historical context, and I point out that equilibrium of various perspectives is a rare condition in the nation's history. The colonial state focused on maintaining racial hegemony, and it weakened other perspectives that promoted development. The post-colonial state continued the trend of allowing one perspective to dominate at the expense of greater development. Thus, key pedagogical issues have not found their way to the national education debate.

Action research is a current worldwide reform that is making its way to Zimbabwean teacher education institutions. In chapter three, I use the published literature regarding work that was done in a southern African context to show that action research is increasing in significance as a way for teachers to take control of their practice through reflection and attempt to make changes. I include literature from the West to offer insights for a Zimbabwean context. One such idea revolves around rethinking teacher education and teaching practice to be less a test of survival and more an induction to a way of thinking and analyzing.

The next three chapters move to a more specific context, Belvedere Technical Teachers' College in Harare, Zimbabwe. In chapter four, I describe the college, the section I worked with, the students' research assignment, and the research I conducted. While there were exceptional individuals at the college, BTTC represents a typical teacher education institution in Zimbabwe. The Curriculum Depth Study (CDS) was a college-wide student assignment. Students were to examine a particular issue in their teaching practice classroom.

In the following chapter, I describe how four students attempted to do their CDS projects. They offered a range of experiences of: "not doing it," "not getting it," "getting it," and "had it." One student, like many others, turned in a report, but it is uncertain that she actually conducted the research she reported to have. Another common experience was for a student to go through the motions of doing research without understanding how it relates to his teaching and learning. Another student "got it" in the sense that he learned that doing research was an integral part of his learning to teach. The last student in the case study had already acquired the skills required to do a research project before she began her teaching practice. These four faced similar issues as their fellow students. Three of the major issues related to 1) the process of choosing a topic, 2) conceptualizing the research, and 3) coping with minimal preparation and support. In describing what it means for students to do a CDS research project, I show how a dialogue at the college was focused on the pedagogical issues.

The sixth chapter examines the dialogue of the CDS from the lecturers' perspectives. Preparing and supporting students in doing action research is something new for the lecturers at the college, and they come from various experiences and points of view. Instituting action research as a mode for the CDS required much negotiation from leaders of the Professional Studies (PS) section. Rather than trying to impose action research on lecturers, they encouraged lecturers with varying points of views and interests to engage in the dialogue. The PS section promotion of action research created a forum where lecturers could discuss what was going well, what was not working, and ways

forward in terms of improving the CDS. The most interesting aspect of the PS introducing action research as a method for thinking about the CDS had to do with the process rather than a product. Tensions at the college were redirected from non-substantive practical issues to address substantive pedagogical concerns of students doing their CDS projects.

In the final chapter, I discuss how I did not find what I originally thought I would. I was hoping to discover lecturers and students engaging in critical thinking and a liberation pedagogical education. Instead, I discovered something more complex – lecturers and students engaging in a dialogue about instituting an education reform. The dialectical approach did not offer quick solutions or easy answers. Pedagogical development took time, but essential issues were addressed and lecturers were committed to finding ways forward.

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CHAPTER 2
Historical Context of Negotiated Perspectives

Posing the Questions

Assuming the premise: A meaningful national dialogue regarding substantive pedagogical issues requires the involvement of all stakeholders. How does a national discourse of stakeholders from various perspectives develop in a country with a colonial legacy of over one hundred years of oppression? How does such a discourse assist reforms on the ground?

Introduction

In examining the national debate regarding education in Zimbabwe, I examine the historical context behind the agendas that were negotiated. Groups have their own perspectives for looking at the world, and they use these as tools to interact in and with the world. Specifically, as a group, community, institution, or nation, people develop a shared language, a way of understanding and framing issues that represent beliefs and values about the world. Stakeholders attempt to legitimate their perspectives by drawing on there beliefs and values, an ideology emerges. The different groups and stakeholders that operated within the context of Zimbabwean history negotiated tensions and contradictions within and between their various ideologies.

The course of Zimbabwean education system development was greatly influenced by the negotiation and contestation between these various stakeholders. First, the white settlers did not have singular interests, ideals, and agendas. Throughout history, white settler stakeholders included: farmers, miners, industrialist, skilled labor, missionary, and administrators. Second, African stakeholders also represented diverse agendas, which included: ethnicities, class, rural/urban, leadership, semi-skilled, and the educated. Third,

institutions also represented stakeholders. For example, the state and capital interests advocated agendas of their own. Finally, the United Kingdom and South Africa represent external stakeholders with globalization agendas in the development of Zimbabwe.

Even though different ideologies came to the forefront at different periods, these stakeholders' opposing perspectives operated at the same time. I argue that because the state often suppressed the voices of opposing points of view, it has been unable to address crucial educational issues related to teaching and learning. Having competing theoretical points of view provides opportunities for divergent voices and views to emerge. Contradictions are minimized, even if tensions are not. Twenty-two years after Zimbabwe achieved liberation, many issues and problems remain from colonial times. The state has promoted nation building as the dominant force with little competition from the others – globalization, free market, and liberation ideology. As a result, the ideals of nation building have been distorted to ensure survival of the Mugabe regime. Many important issues of the national education debate have been neglected while the state pursues contradictory policies.

In this chapter, I look at the historical contexts; starting with early colonialism, through white settler rule, liberation struggle, independence, economic structural adjustment, and the current period dominated by farm invasions by ZANU(PF) supporters. Some of the stakeholders' theoretical perspectives in play were different than those of today. For instance, African traditional culture and colonial racial hegemony were two perspectives that

gained dominance in various periods of Zimbabwe's history, however they are no longer play a principal role in the current national discourse. In looking at the present, I discuss how stakeholders' perspectives operate on the micro level of Belvedere Technical Teachers' College. In the end, I make two conclusions 1) the lack of the state's involvement in many important educational issues allows the college freedom in determining pedagogical issues and 2) because different perspectives are allowed to flourish on the micro level, the college is in a position to make effective pedagogical reforms.

During the colonial period the dominant perspective was one of racial hegemony. Various white stakeholders joined in a common agenda of maintaining political and economic dominance. While this policy advocated neglect for many years and later limited African education, it was also in contradiction to other forces, namely the African traditional culture perspective, which developed through many years of complex social relations, and the need for economic production. Nation/state building was a perspective that grew out of this period. For the first time, settlers and Africans were forced to address political and economic issues through the state on the national level.

Various African stakeholders had a common interest in resisting the oppression that resulted from the dominant perspective of racial hegemony. During the liberation struggle, liberation fighters/supporters attempted to create alternative approaches to education. However, due to many constraints, they were unable to create schools that reflected a liberation ideology. During the first years of independence, the country attempted to continue on the path of

transcending its colonial heritage with a liberation ideology. However, this perspective took the form of talk more than action.

During this period, no particular perspective was able to dominate the agenda of national development. Stakeholders represented four theoretical perspectives: free-market[1], liberation ideology[2], nation building[3] and globalization[4]. In the late 1980's another change, adhering to the structural adjustment policies of the World Bank, led Zimbabwe more towards a free market ideology. Until 2000, the free market had gained legitimacy at the expense of other perspectives. The farm invasions starting in February of that year signaled a major shift. Nation-building became the state's overwhelming priority and, as a result, not only were the other perspectives neglected, the pursuit of nation-building became so extreme that the ideal became distorted.

Colonial Period

In describing the tension and contradictions of colonialism/white settler rule and their relationship to stakeholders' interests, I will use Ian Phimester's historical framework (1988) in describing the time periods. However, I do begin with a look at a pre-colonial Zimbabwe. Phimester's first two periods of

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[1] I use free market and not capitalism to focus on the ideal that open markets will lead to the greatest efficiency.

[2] The general idea of liberation ideology is that society in general and education in specific are tools for people's emancipation. People learn to become the protagonists in their lives and in changing oppressive structures. Through his writings Paulo Freire (1970, 1973, 1978, 1985) continues to be a leading advocate of liberation ideology.

[3] Nation building focuses on using education to strengthen the state including the creation of stable institutions.

[4] Burbules and Torres (2000) discuss how globalization takes a free-market approach where goods, labor, ideas, culture are exchanged on an open market. However, it is more interested in the exchange process, as Burbules and Torres defines globalization as "the intensification of worldwide social relations which link distant localities in such a way that local happenings are shaped by events occurring many miles away and vice-versa" (pg. 29).

colonization were a time of merchant and speculative enterprises combined with exploitative and segregation practices. Mining (and later agriculture) dominated colonial economic interests. In the third period, the white settlers gained control of the state. They maintained similar practices including those of racial hegemony. The following time frames are influenced by the rise of the manufacturing industry, which forced more racial integration and dramatically changed social relationships. The state's intention of racial hegemony supported a continuation of the extreme exploitative and segregation practices; however these actions were in contradiction with the new economic situation. In the final period, the white settler regime feared losing racial hegemony so it took reactive measures.

Pre-Colonization (500 AD – 1888)

It is important to note that prior to colonial rule, Africans in present day Zimbabwe did have education. Although education was an integral part of life for most Africans, no formal education system existed.

While Zimbabwe has a history of pre-colonial empires, such as Mwene Mutapas' (1420 – 1480) that spanned across most of central Africa and conducted international trade, the majority of the Shona people were involved in subsistence enterprises. Most people grew crops, kept cattle, and took part in other daily activities such as pottery, basketry, and weaving. Each village contained a few people who specialized in metal-smithing. These people made tools and weapons out of iron for others and bartered for the goods they needed.

The traditional economy had little to do with individual competition. Education revolved around maintaining the society.

Much of the child's education was concerned with the acquisition of productive skills. As soon as Shona children were weaned, they began to learn useful skills by observing and imitating their parents. The girls learned domestic work from their mothers, while fathers and male relatives taught boys to hunt and herd. Also, from an early age, children were taught to maintain the correct relationship with others, the dead as well as the living (Grant and Mamutse, 1983).

> Two types of education were passed down through the generations. One was the body of knowledge which was necessary to carry out daily activities and occasional rituals in the household and village and secondly, the body of traditional lore concerning natural phenomena, custom and tribal history. (Murphree, Cheater, Dorsey, and Mothobi. (eds.) 1975, pg.39)

During this "Iron Age", education was not a battleground for different theoretical forces. The teaching/learning represented and reinforced the dominant and only viable perspective at that time, one of African traditionalism. Because there were no other agendas – economic, political, or nationalistic – there was no need for schools to be the sites of these debates. As a result, teaching and learning took place during this period, but there was no need for a bureaucracy to mediate various interests.

The British missionaries from the London Missionary Society (LMS) introduced formal education to Africans in the early 1860's. From the beginning, the ideas of the European education administrators were in conflict with the

beliefs of the local culture. The British wanted to change the traditional ways of the Africans.

Missionary observers were taken aback by the perceived ferocity of Mzilikazi's rule (1822 –1867) and the harsh conditions in which his people lived. As a means to some measure of social reform they turned to the promotion of education (Atkinson, 1972).

Early missionaries followed a theoretical perspective of "cultural civilization." Their purpose of schooling was to bring religion and civilization to the African. It was in their interest to view Africans as uncivilized heathens, so mission schools could turn "savages" into "civilized", "moral" leaders of the people. Of course, civilization was narrowly defined in Western European terms. Reports from colonists often contradicted this view of Africans being wild. Charles Rudd negotiated with Mzilikazi and later with Lobengula for control of the area.

> [Rudd] admitted that he had been greatly surprised by the high level of intelligence that the king demonstrated, adding, "He was as sharp as a needle, and remembered everything. If you contradicted yourself, he was on you at once." (Mungazi, 1992, pg. 8)

Because the missionaries' view was in direct contradiction with the traditional African cultural perspective, the two education systems did not overlap in terms of interests or constituents. The education systems remained separate with very few Africans opting for that of the missionaries. The first official African school opened in 1861. By its third week the school closed because the students stopped attending classes. Other early schools such as the ones in Inyati led by

Moffet or in Empandeni with Jesuit Fathers were also not effective (Atkinson, 1972).

Mzilikazi, the Ndebele king who had conquered the Shona people, and his son Lobengula rejected the aims of British education, but they put up with them for the many promises the British had made. However, they resented European involvement in politics through the schools and did not see schools serving needs of the people (Kumbula, 1979).

During this period the two dominant perspectives existed, traditional culture and imposed European cultural hegemony. While varying African stakeholders represented different levels of power, their ideals were articulated in terms of maintaining traditional culture. The different white settler stakeholders shared a common ideology of cultural/racial hegemony.

Table 2.1 – Theoretical Perspectives of Stakeholders During Pre-Colonization Period

Stakeholders	**Interests**	**Theoretical Perspective**
White Settler - State Administrators - Missionaries	 Garnering control of resources Converting Africans to Christianity	European Cultural/ Racial Hegemony
African - Leaders - Common People	 Maintaining control of people and resources Daily living through maintaining social connections	Traditional Culture

There were no common interests between the white settler and the African stakeholders. For example, each group had its own view of how knowledge is created. In the traditional view, knowledge is created locally and passed down through generations. The colonists who were pursuing a policy of European cultural hegemony valued only the knowledge that they brought with them from

the west. As a result, dialogue and negotiations relating to the construction of knowledge between the stakeholders of the two perspectives did not exist.

The Beginnings of Colonialism - The Turn of the Century

In 1888 Cecil Rhodes and the British South African Company (BSA Co.) turned its attention towards seeking "the second Rand" in present day Zimbabwe. He and his entourage forced Lobengula to sign the Rudd Concession (30 October 1888), a treaty that gave the British exclusive rights to the mineral interests. From 1890-93 Rhodes invaded the country and took not only minerals but land and livestock too. The Ndebele uprisings in 1893 and in 1896 were suppressed and led to more repressive moves of taking land and livestock, forcing people into reserves, and humiliating chiefs.

Two groups of colonial, economic interests developed; one of speculative interests in mining, and the other of settler and merchant interests. The latter stakeholders were interested in exploiting immediate opportunities that required a stability of economic and social relationships in terms of having long-term labor pools and markets. The former stakeholders' priority was to have cheap labor to make labor-intensive mining profitable. To create a large pool of cheap labor, the colonial state took many actions to destroy traditional economic and political systems.

Between 1888-1889 Britain gave BSA Co. a royal charter to run the colony. Since the control of the area was in the hands of a business enterprise, the colonial state pursued a policy of creating cheap labor. Lobengula's power was destroyed and his wealth was taken away. The colonial state forced

Africans to pay taxes, and those that resisted were severely punished. Most African men had to seek wage employment from the colonial sector to be able to pay the taxes.

In 1896, the Ndebele and later Shona uprisings (the first Chimurenga) sent a clear message to the white colonists; the Africans were not complacent. The white colonialists and settlers lost much trust in the BSA Co. to protect them and their interests. It was not until the development of the railroads a couple of years later that speculative interests returned. Large-scale gold mining was profitable with the cheap labor. Some Africans were productive in trading crops, and as a result, they were able to generate income to pay taxes and avoided working in mines.

In 1901, the British combined Mashonaland and Matabeleland and called the colony Southern Rhodesia. The BSA Co. continued to rule the area. The local government headquarters was moved from South Africa to Salisbury. The colonial state was faced with a tension of simultaneously promoting two perspectives, those of racial hegemony and economic production. As Phimester argues, during this period these two perspectives were compatible. The mining and later the cash crop agricultural economy proved to be productive means for enriching the small population of the whites and the colony while at the same time limiting social mobility of Africans.

Education policies reflected the two separate realities. An education ordinance in 1899 recognized two classes of schools, voluntary public and public nondenominational schools. The former were managed by religious bodies and

the latter by the government. The voluntary public schools charged a small fee with the idea that only those who truly wanted to attend would do so. These were the schools for the Africans. The whites attended separate, better funded, government-backed schools (Atkinson, 1972).

The government did not want the responsibility of educating Africans and left it in the hands of missionaries. Some missionary interests were in conflict with those of the state, that is the formers' attempts to develop leadership skills (including reading) in a few Africans. However, at this point in history, the state did not wish to devote many resources towards African education. In 1901 the government spent less than $400 for all of African education (Kumbula, 1979). The government kept its schools (for white children) under a different department in the Ministry of Education. The goals for each group's education represented the government's interest.

> The education for Africans was intended, from the beginning, to serve two purposes: to facilitate conversions to Christianity; and to give Africans the training needed to fulfil European needs for African Labour. [For Europeans] to inculcate the moral principles on which the Empire was based, to provide an education equivalent to that available in South Africa and to minimize ethnic tensions among the Europeans themselves (particularly those resulting from the Afrikaner defeat in the Anglo-Boer war). (Murphree, 1975, p.39)

During this period the colonial state attempted to create an aura of what Crawford Young (1994) describes as "Bula Matari" or crusher of rocks. Its power and domination were not to be questioned. It imposed a governmental structure that was a "pure model of alien bureaucratic autocracy." This government attempted to replace all traditional structures of power. Schools were one tool used to undermine traditional practices and authority structures, and they

operated with the premise that the Europeans were intellectually superior. At best the colonialists' intentions could have been seen as being paternalistic; at worst they could have been viewed as trying to destroy traditional institutions in order to create and maintain a large pool of cheap labor.

In terms of examining theoretical perspectives from various stakeholders, a common agenda of economic development was created. It overlapped with interests of the previously dominant forces, African Traditional Culture and European Cultural Hegemony. A few stakeholders within traditional culture benefited from the economic development. Mamdani (1996) argues that colonial powers gave local chiefs more authority and influence than they maintained during the traditional era. Also, the Africans were able to enjoy a few (perhaps, a very few) of the products mass produced from the colonial power, especially those of the petty bourgeoisie. There were more common interests with those perpetuating colonial hegemonic power and those with economic development interests. At this time, colonial stakeholders of settler farmer, mineral investors, missionaries, and administrators shared the desire to pacify and co-opt the Africans.

Table 2.2 – Theoretical Perspectives of Stakeholders During Early Colonial Period

Stakeholders	Interests	Theoretical Perspective	Common Ground
White Settler - State Administrators - Missionaries - Mining Interests - Merchant Interest	 Garnering control of resources Converting Africans to Christianity Creating cheap labor Exploiting a stable social relations	Racial Hegemony	Economic Develop-

African - Leaders - Common People - Laborers	 Maintaining some control of people and resources Daily living through maintaining social connections Economic mobility	 Traditional Culture	Develop-ment

Colonial Expansion - 1900-1923

After the turn of the century, the colonial state and later the white regime quickly squelched any African movements to advance themselves in economic or political terms. In the first decade of the 1900's, some Africans were able to negotiate ideas of free-market capitalism with their traditional culture. Some became successful entrepreneurs selling supplies to the workers in the mines but, more often than not, colonists imported foreign goods to undercut traditional trades. For example, dishes manufactured in England soon became cheaper to import than for Africans to produce pottery.

Tensions between mining and agricultural industries developed during this period. The former stakeholders represented large foreign capital where the latter represented a growing settler population with domestic concerns. Both were competing for cheap labor and, as a result, the state promoted consistent policies. It forced Africans off good land, increased taxes including a land tax, and recruited workers from the north to undercut local workers and disrupt social standings. Most Africans lost their land and their herds in the process. The few successful Africans with decent wages and successful entrepreneurs represented a small population of the petty bourgeoisie; class lines were starting to be drawn.

Many Africans began to see a value in schools in terms of providing one of the few opportunities of social mobilization in a limited capitalist economic system. At the same time, the colonial state maintained its imperative of racial hegemony. An ordinance of 1903 legislated that the Africans' education in English was to have a purely functional use; with it they could understand the orders that they were given, but there was to be no reading or writing. Both the state and the missionaries "enthusiastically approved" the vocational aspect of native schools. The industrial skills taught were to be "simple" and "rudimentary" (Atkinson, 1972, pp. 90-94). The Africans were less enthusiastic about learning vocational skills. The few economic opportunities schooling provided were primarily clerical and required "book learning." Even though the Phelps-Stokes commission report of 1923 advocated for more vocational training, traditional trades provided few opportunities. Most Africans knew that as soon as a trade proved profitable, their access to it would be denied.

In 1921 Dr. H.S. Keigwin became the first Director of Native Development, and he set goals for African education. They were:

1. Primary (not secondary) education
2. Industrial (not literary) focus
3. Community funding from African reserves (not the government). (O'Callaghan, 1977, pg.17)

White Settlers Take Over - 1923-1939

By 1923 the settlers gained some degree of sovereignty over the country, and a white settler prime minister led Southern Rhodesia. The British government maintained responsibility over defense, mining royalties, and Africans affairs, but the local whites were in charge of all other governmental

activities. The settler regime supported the domestic agricultural sector, even to the point of promoting unsustainable farming practices. Tobacco and maize production increased greatly. These practices depended on stable international markets and cheap labor, and at the same time maize crops were depleting the soil of nutrients. Failure of international markets and the unionization movement forced the settler regime to balance the continuing tension that was quickly becoming a contradiction; how to encourage economic productivity while maintaining white racial hegemony. By destroying local trades and by not providing a livable wage, the settler regime failed to utilize the potential of African production; the massive effort that went towards limiting African progress could have been used for economic progress for the nation.

The issue of the government limiting what missionaries taught resurfaced in 1927. The missionaries wanted to see literacy used strictly for religious instruction and the colonial officials needed semi-skilled workers. The Commission of Inquiry into Native Education of 1927 made three recommendations:

1. Literacy teaching was to be left in the hands of missionaries.
2. Natives were to be prevented from proceeding beyond South Africa for education.
3. Industrial education was to be emphasized, i.e. agriculture and elementary handicrafts. (Mungazi, 1992, pp. 23-24)

The 1928 Tate Commission guaranteed the division of white and black schools and made sure superiority of the white race was taught (Kumbula, 1979, pg. 59). The missionaries' were allowed to continue with their primary interests of evangelical conversion. Their focus included teaching religious education,

literacy, and vocational (industrial) skills. Teaching the Africans to read caused some controversy within the government. The whites resolved the debate with the conclusion that it was "the responsibility of the 'dominant race' to impart some measure of their cultural heritage" (Atkinson, 1972, p.93).

Since "book learning" offered Africans one of a very few routes to economic opportunities, demand for schooling increased. By the 1930's so many Africans were being educated that the whites thought it necessary to regulate the speed of their intellectual progress. The regime was worried that the Africans' education would run ahead of the social and economic progress that the government wanted to allow. New policies encouraged the expansion of primary school for a wider spectrum of the population rather than providing any advanced education for a few of the Africans (Atkinson, 1972).

Finding qualified teachers was a major problem. In 1929, there were 1,723 Africans teachers in the system. Of that number, 1,624 had not passed standard VI (graduated elementary school) and 1,260 had not finished standard IV (sixth grade) (Atkinson, 1972). A teacher-training center was built, but it did not provide an education at a level as high as secondary school. World War II created an even greater lack of qualified teachers, especially European.

Meanwhile, the whites continued to appropriate land. The Land Apportionment Act of 1931 divided the land into white and African areas. The government gave the blacks only thirty-one percent of the country that once was all theirs (Needham, Mashingaidze, and Bhebe, 1984, pg.163). By then most of the good land and cattle of the Ndebele had gone to the white men who fought in

the Shona and Ndebele "uprisings". Other settlers took land in Mashonaland for tobacco and tea plantations. Most Africans were unable to buy land and thus were forced to live on the reservations. These places were notorious for exhausted land, lack of water, tsetse fly, long distances to railroad markets, and poor schools.

Prior to World War II, trades done by whites were not taught to Africans. Employment competition between races was unacceptable. All forms of industrial training were to enable Africans to work only under whites. The Industrial Conciliation Bill gave power to white artisans to determine who was accepted for the one-year apprenticeship-type training (Moyana, 1988).

During the depression, international markets fell, making the growing of most agricultural products – maize, cotton, tobacco, and beef – unprofitable. Gold production kept the state afloat. The state's involvement in the economy grew with the creation of marketing boards, loans, and construction of roads. All of these policies were to offer whites benefits that were denied to Africans.

Foreign interests were less concerned with maintaining white racial hegemony than producing profits. Tensions grew due to the state providing additional advantages for whites in sectors where they were not viable without much government assistance. Other tensions grew out of the regime limiting African progress. The state was dependent on taxes from Africans to subsidize white farmers. On one hand, the more productive Africans were, the more the white regime could tax them. On the other hand, the white regime wanted to limit all African social mobility. Phimester (1988) shows how, when there were

opportunities, African entrepreneurs were able to respond. The white regime used many methods to restrict Africans from any labor that would be in competition with whites. For instance marketing boards were located near whites' farms and provided higher prices than that offered to Africans. Africans were restricted from skilled jobs and required to carry passes that limited the extent they could travel.

Rise of the "Second" (Manufacturing) Industry - 1939-1948

During the World War II period, international markets and trade routes became even less stable. International trading – while still the backbone of the mining and agricultural industries – exposed many vulnerabilities of the nation. For example, the state had to import food even with strong government support for large scale, white farmers, and the regime became dependent upon the African farmer being productive. The second industry started as manufacturing supports for mining and grew into producing a variety of light consumer goods and processed food. For mining and agricultural interests, the state promoted a large transient labor force. Owners of manufacturing industries had different needs. They wanted a labor force that was urban, stable, and rationalized, i.e. socialized into the norms of the workplace.

Living conditions worsened for the growing, urban population seeking stable employment in factories. Overcrowding was a growing problem, and wages did not keep up with inflation. Poor health and difficult working conditions were the realities of most African urban workers. Their counterparts in the rural areas were faced with their own difficulties; high density causing traditional

farming practices to destroy the soil, low prices for African produced maize, drought, government's policy of culling cattle (to limit spread of disease), and the regime continuing to push Africans off good land into the unfertile land of the reserves.

African resistance became more organized during this period. Urban workers participated in passive aggressive acts, such as work slows. In 1942, asbestos miners were able to stage a successful strike, which led to mass organization throughout the country. Africans in the reserves shared a common enemy in the white settler regime and generally supported resistance movements.

During this period, the state was faced with many tensions, some of which became contradictions. The first industry, mining and agricultural interests, depended greatly on trade with stable, international markets with no quotas or tariffs. The emerging manufacturing industry could not compete on the international, open market and required state intervention restricting competitive products. Much of this tension was resolved by South African policies, which protected its domestic markets and undermined much of Southern Rhodesia's international trade. Thus, the state further developed the second industry.

By promoting the manufacturing industry, the state was faced with a contradiction. In the past the state was able to promote policies of white racial hegemony and economic production through segregation and limiting African human capital. With the rise of manufacturing, the state was forced to change its policies regarding how it dealt with Africans. The regime had to create a stable

labor force that was semi-skilled and socialized into the workplace. The white settlers were always dependent upon the cheap African labor, but during this period they could no longer ignore their interdependence. The welfare of Africans was crucial for the welfare of white businesses. On the other hand, treating African workers decently was a challenge to white racial hegemony. Because racial domination was the priority for white settlers, they were faced with a contradiction.

This contradiction was played out in the education sector by the state realizing the need for education to help make Africans more productive; and, at the same time, the state realized that education was a tool of social mobilization. During this time the African demand for schooling was greatly increasing. The state's policy was one of expanding elementary schooling and limiting everything beyond. Specifically, before 1939, there were no secondary schools of any kind for Africans. Less formally qualified African teachers remained at the lowest class of schools, which were called "Kraal" (village) schools. By 1951, these schools were responsible for educating 86,421 students. Their only educational requirement was to teach the students an understanding of English. There were two upper categories of African schools, which were run by Europeans. The most intensive education was still not as high quality as that given whites. These upper groups of schools educated a tenth of the African students (10,630) in 1951 (Atkinson, 1972). In 1952, 84,444 students started grade one, but by end of primary school there were only 10,921. When this group started secondary school there were 1,919. Only 386 of them reached "O" level, and 56 reached

pre-university level. The average white person at the same time had more than 10-11 years of schooling (Moyana, 1988).

As the state started to give into African demand for secondary school, it took a more active role in regulating education including greater surveillance. The first government supported secondary school was built in 1946 at Goromonzi. The first class to take the Cambridge Certificate Exams (the British standardized tests needed to graduate) shocked the territory with its results; out of 34 students, 33 passed (Atkinson, 1972). Africans not being intelligent enough could no longer be used as an excuse not to build more secondary schools.

Fear of Resistance (1950's – 1960's)

A reduced supply of labor that was permanent, semi-skilled, and socialized, gave unions and workers much more influence in negotiations. Also, the uneven capitalistic development had created a middle class of African intelligentsia who were capable of forming organizational opposition. The 1951 Commission of Inquiry into Native Education, headed by Alexander Kerr, articulated the fear the whites had of higher levels of African education.

> The intelligent African who is denied equal opportunity will soon become sour and embittered and be anything but a good citizen. (Mungazi, 1992, pg. 51)

In 1953, the Kerr Commission made its recommendations for African education. The government was to push for vocational education in response to post-war industrialization, yet Africans' interest in such schooling was not great. Africans were still unable to compete with whites for skilled jobs. The education system could provide jobs for skilled African clerks. Commercial courses,

business calculations, bookkeeping, typewriting, shorthand and commercial English were offered in a few schools. Also domestic science courses were available for a few women. Demand for these few opportunities was very high; for example, in 1958, the school in Mzingwani had 862 applications for 100 seats. Prime Minister Godfey Huggins found it politically necessary to increase education for a few. He saw the need "to create an African middle class as a buffer against the proletariat" (Mungazi, 1992, pg. 37).

Settlers in the region attempted to consolidate control over the large migrant labor force by creating a federation of the neighboring territories, Northern Rhodesia, Nyasaland and Southern Rhodesia. The Federation lasted from 1953 until 1963 when liberation came to other countries of the region. In Zambia, sixty-four years of colonial rule left that country with only 1,200 school-certificate holders to manage the nation (Needham, 1984).

The progress of self-rule was not as rapid in Zimbabwe as in its neighbors. There were many more white settlers (approximately 200,000) and they were little influenced by world opinion. While many Africans joined the African National Congress (ANC) and the (Southern Rhodesian) National Democratic Party, the settler regime cracked down on the political parties. Their leaders were either detained or exiled.

Ian Smith, an ultra conservative, took over as Prime Minister in 1965. He illegally declared Unilateral Independence (UDI) from the British government. The Commonwealth, the United Nations and the Organization of African Unity did not recognize Southern Rhodesia's independence from Great Britain. Smith took

a hard line against any African movements. He saw education as part of the problem, as he stated:

> We had our first encounter with terrorist incursions across the Zambezi early in 1961. I believe that the African politicians were looking for a cause, and education seemed to appeal to the African masses more than any other. (Mungazi, 1992, p. 82)

Even with the state's restriction of African education, enrollment had risen to 663,371 African students in 1965. However, the government spent 1.5 pounds for each black student compared to 26 pounds per non-black student (Kumbula, 1979). Smith's objective, a return to complete racial segregation, was carried out through a lack of funding. School conditions continued to decline, and African teachers were arbitrarily dismissed by the hundreds (Mungazi, 1992).

The New Education Plan of 1966, like the one adopted four years earlier, was in favor of "full primary education for all blacks who can reach a school..." The non-black and the African schools received close to the same amount of money (approximately 6 million pounds each), but the former needed to educate a population of 236,000, while the latter was responsible for 4.5 million people (Atkinson, 1972). The plan allowed for 12.5% of the African students who completed primary schooling to proceed to secondary education. Thirty-seven point five percent of the students could go into vocational training, and the remaining 50% were to have no formal education at all (Mandaza, 1986).

The Smith regime lost support from countries around the world. Most countries participated in a worldwide boycott of Southern Rhodesia. Consequently, the state developed the second industry (manufacturing) to a greater extent, moving further towards self-reliance. Contradictions increased

because the country was becoming more dependent on a qualified African labor force; at the same time, Africans were being denied opportunities for advancement. As a result, the liberation struggle and its ideologies gained momentum.

Role of Stakeholders' Perspectives in Colonial Periods

The forces that influenced the education system during the colonial/settler rule experience represented contradictions rather than tensions that could have been balanced. The dominant perspective coming from the various white stakeholders was one of white racial hegemony. Missionary education propagated the message that everything African was uncivilized, and thus inferior. The state's role was one of limiting and restricting education. Because education was one of the few sanctioned routes to social mobility, the state's control of access to education restricted African advancement. By denying Africans an opportunity to compete – fairly or otherwise – the state was able to use education to keep Africans in an oppressed state. In other words, the door to opportunities was held shut by the white regime.

Thus, education was highly prized. But what was this colonial education? Throughout white rule, school structure and course content revolved around that of the United Kingdom.

> In high schools, students sat for an external British examination, the Cambridge School Certificate. The Cambridge Syndicate prepared the syllabus, and set and marked the examination. And here there was no pretence of relevance. The geography syllabus (1960) assigned two thirds of the course to British Isles, British Empire and Commonwealth. In literature (1968) the list for junior high school consisted almost exclusively of simplified versions of British literary classics like *Oliver Twist, Treasure Island, Monte Cristo, Coral Island* and *Jane Eyre*. (Moyana, 1988, pg. 52)

The education system remained hierarchical and represented the view that knowledge was created in England. Compliance was demanded and questioning had no place. For the African students who did work their way through the educational system, they received an ideology of European supremacy.

This theoretical perspective of racial hegemony is full of contradictions. If whites/Europeans were so superior, why did the state need to limit African access to education or continuously offer whites unfair advantages? Also unaccounted for was the state's dependency on African labor. With no other theoretical perspective in balance, the one of racial hegemony was able to dominate for ninety years.

The idea of the value of economic production in terms of schooling was also riddled with contradictions. Not until the rise of the manufacturing industry did the state have any interest in mass education at the elementary level to produce socialized, semi-skilled workers. Schooling might have produced "good workers", but the state continually tried to limit the numbers of Africans who could become "good workers." While the schools stressed the value of vocational skills, such opportunities for economic benefits were nonexistent, mostly due to Africans not being allowed to compete with white, trade workers. Schooling did not promote an entrepreneurial spirit. Africans who did develop such skills most often did it without the assistance of the schools.

The colonial state had the task of managing the contradiction between white racial hegemony and African development in its efforts of nation building.

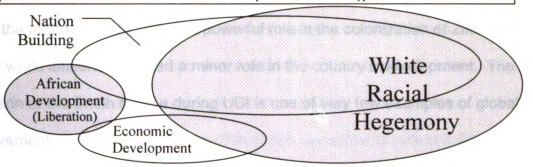
By assisting whites with unsustainable economic ventures, it is not clear if the state was following a pursuit of improving the economy or simply attempting to guarantee economic success to a few. The state's denial of Africans' opportunities to be productive suggests that national production was not as great a concern as white racial hegemony. Each stakeholder had their own interests, and common agendas could be identified on some level. In terms of economic development and the building of national structures, the various groups had interest in increasing productivity and developing a national forum to address concerns.

Table 2.3 – Theoretical Perspectives of Stakeholders During Mid Colonial Period

Stakeholders	**Interests**	**Theoretical Perspective**	**Common Ground**
White Settler			
- State Administrators	Maintaining control over people and resources	Racial Hegemony	
- Missionaries	Converting Africans to Christianity		Economic Develop-ment
- Mining Interests	Creating cheap labor		
- Merchant Interest	Exploiting a stable social relations		
- Farmers	Maintaining cheap labor		
- Industrialist	Creating stable labor and protection for markets		Develop-ment of national institutions
African			
- Leaders	Maintaining local control of people	African Development	
- Common People	Daily living through maintaining social connections		
- Laborers	Economic mobility		
- Educated	Economic and social mobility		

However, the dominance of the colonial state in maintaining racial hegemony came at the expense of the development of Africans and economic development.

Figure 2.1 – Model of Theoretical Perspectives During Mid-Colonial Period



The conditioned capitalism of the white settler regime little resembled a free market ideology. The state continually was involved in the market by creating supports for white agriculture and mining and at the same time systematically denying Africans' access to markets. During the colonial period African development was viewed in terms of resistance against white oppression. There is little evidence that ending the oppression meant creating liberating structures rather than increasing African access to the existing institutions.

Nation building during this period related to the advancement of the colonial state and later the white settler regime. There was little attempt to unite the interest across the nation. However, as Crawford Young (1994) argues, the idea of the nation-state grew out of colonial action. The colonial state had imposed this infrastructure of government and boundaries on regions and groups of people that otherwise had little or no relation; the national boundaries had nothing to do with the realities of the people. Nonetheless, during this period the colonial state imposed a structure that would determine how politics and economics were to be negotiated, i.e. through the state on a national level. As I show in the next part, nationalism became a key element for the liberation struggle.

Global forces took a back seat in the national discourse. While interests from the metro-pole UK played a powerful role in the colonization of Zimbabwe, other world influences played a minor role in the country's development. The isolation of the Smith regime during UDI is one of very few examples of global involvement.

African Response - During the Liberation Struggle

From 1977 to 1980 – the height of the liberation war - ZANU attempted to develop its own system of education that responded to the interests of the liberation fighters and the needs of a future Zimbabwe. In describing the situation in Rhodesia at the time, the Minister of Education Fay Chung states in *Socialism, Education, and Development: A Challenge to Zimbabwe* (1995), "Blacks saw this restriction of educational opportunities as a plot to keep them subjugated. They could not acquire the managerial, professional or technical skills that would allow them to compete with Whites. To make matters worse, the curricula emphasized White achievements and abilities. Blacks needed education which would both qualify them and emancipate them". She highlights a tension between working with and trying to change the system.

The schools in the liberation camps began to provide an alternative to the white-settler education system of Rhodesia. However, a lack of resources was one serious obstacle for the development of the schools. These schools were based near guerrilla camps in Zambia and Mozambique. The threat of Rhodesian troops attacking and bombing the camps was common and devastating. As a result, groups of students and teachers traveled over a

kilometer away from the camp to congregate, often under a tree or in a makeshift bungalow. Many camps did not have basic supplies of paper, chalk, chalkboards, pencils, books, etc. Paulos Nare (1995), a former teacher, was given the task of creating an education system for the many thousands of residents at Victory Camp. Irrespective of age, all former students with at least a form II (two years of secondary school) level of education were to be teachers; all others were to be students. Consequently, classes were quite large with 50 - 60 students. Enrollments fluctuated greatly with many new arrivals and departures to the camp on a daily basis. The goals for this education were to:

1) equip students with practical productive skills;
2) prepare the refugees for a new, liberated, socialist Zimbabwe;
3) to avert boredom and stress that is associated with life in the camps;
4) to conscientize students against oppressive and exploitative ruling systems.

Because it was so difficult to create something out of nothing, education reformers in the camps used the Rhodesian model of education as the framework for their new system. Due to a lack of highly qualified teachers or teacher education capacity, teachers were unable to lead the way to reforming classroom practices. Because many teachers were new and had few distinctions from the students, issues of control continued to dominate much of the structure of education. The schools did not rely on expulsion, but they did use corporal and other types of punishments, as well as the monitoring system that included two prefects and a monitor. As a result, the schools often reflected a hierarchical suppressive system similar to the ones controlled by the Rhodesian state.

Part of the tensions came from the schools' attempt to present liberation ideals and at the same time gain legitimacy. Legitimacy could have come from many sectors: 1) the system living up to the ideals of liberation ideology, 2) the system providing opportunities for social advancement for individuals and social efficiency for a future Zimbabwe, 3) the system responsive to the "traditional" values of most of the residents of the camp.

It is not clear to what extent liberation ideology was actually put into practice. References were made, such as "The Paulo Freire method was used" (Chung, 1995, pg. 145) or "the political commissars carried out deliberate indoctrination processes to cultivate and instil awareness" (Nare, 1995, pg. 135), yet these authors provide little description as to how that instruction was different from the standard forms of teaching that were adopted from the Rhodesian education system. Chung argues that the Denmark's Development Aid from People to People (DAPP) teacher education was disappointing because it lacked specialization for students to engage in new endeavors. DAPP's philosophy was one of "learning from life rather than from academic instruction" (1995, pg. 146).

Nation building concerns were relevant to the education reforms at independence in 1980. The new state needed to create an education system that would include everyone, and it needed to accommodate for the type of opportunities that the Rhodesian system was denying. Since more opportunities for advanced education were opening throughout the world, the schools needed to provide an education that would prepare students to be: a) accepted and b) prepared for the challenge. As a result, the education reformers needed to

provide an educational system that met world institutional standards. Also, ZANU was attempting to create a structure with people in place to take over the education system at independence. This system needed to be recognized as being legitimate by international donors as well as by the general population.

Another tension, between traditional and modern ideals, existed. Chung states that it was "reflected in contrasting ideological manifestations, with one group asserting its adherence to democracy, nationalism, modernism, and later Marxism-Leninism, while the larger group of peasants clung to their traditional ideology, dominated by the traditional resistance figures such as Nehanda, Kaguvi, Chaminuka and the ancestral spirits" (1995, pg. 146). This tension showed itself when primary school teachers, often youngsters who remained in school, had authority over the older students who had left school when they were very young or never attended. Traditional age and gender roles were being challenged.

Rather than trying to discount the traditional perspective, ZANU made great efforts to win traditional support. Chung argues that members of both perspectives tried hard to build understanding and collaboration. "Whilst the spirit mediums remained the upholders of traditional values, such as respect for life and preservation of the environment, they were able to accept modern trends such as the use of sophisticated modern weapons and education. The spirit mediums at no time opposed modern education, many of them having received primary education themselves" (1995, pg. 146).

While the liberation ideology may have challenged some of the traditional structures, African stakeholders found common ground in opposing the dominant perspective of the Rhodesian state (that of maintaining white racial hegemony through a distorted capitalism). Because the peasant population had been denied access to the free market structures, i.e., fertile land, viable markets, and fair prices, believing in the free market ideology made little sense for most of the population. Liberation ideology questioned the redistribution of resources and opportunities and advocated for more political participation and economic equality - issues directly related to the oppression of the traditionalists and the majority of the population.

Even with a strong alliance between the two perspectives of free market and liberation ideology, schools did not reflect a radical departure from those created from the colonial experience. In some aspects schools adhered to a liberation ideology, they promoted more production where learning practical and academic skills were combined. There was strong emphasis on everyone being involved, and the curriculum changed using much of the Marxist literature from the Soviet Union and China. However, how much schools could change was dependent on the realities of the situation. The schools in the camps relied on donors for all supplies. The structure of the organization was not well grounded with experienced and trained educators, and the schools needed to maintain legitimacy in terms of international standards to send students abroad.

Independent Zimbabwe

In 1980 Ian Smith was forced to sign the Lancaster House Agreement, which set up democratic elections. Robert Mugabe of Zimbabwe African National Union (ZANU, which later became ZANU-PF) became Prime Minister. The new government made great efforts towards mass education making primary and secondary schooling available to everyone. However, rather than transforming the structure of education, the government expanded the existing system. In the early days of independence, leaders were critical of the education being provided, and they used language from liberation pedagogy. In *Education, Liberation and the Creative Act* (1988) Toby Moyana quotes Fay Chung, the Minister of Education:

> Colonial education is characterized by its lack of creativity, neatness, rigidity, control, respect for tradition and authority. People educated under this system can only be obedient to orders from above. They cannot create and control reality for their own betterment. They cannot solve the problems they face, but can only imitate the solutions of others, unsuitable as they are to the present situation. They excel in *apemanship*. Creative education on the other hand, develops real intelligence and originality, and therefore can lead to real solutions for pressing problems. The question is: what type of education do we have today in Zimbabwe? (p. vi)

Chung's ideas were similar to Freire's in terms of regarding education as being political. In her book *Socialism, Education, and Development*, she wrote:

> What this means is that there is no ideological neutrality in education. All education systems serve the interests of particular classes and social groups... Socialists have always understood the important role of education in the process of socialist transformation, for by making people aware of their conditions of existence you release the power that is in them, the power to change society for the better. (1985, pp.87-88)

English remained the mode of instruction for upper elementary to university as well as one of the national languages. In his examination of teachers' goals for teaching literacy, Albert Natsa (1994) found a reality different than the ideals Chung advocated. He shows that the greatest emphasis was towards the teaching of basic skills such as grammar for the mastery of writing and speaking "correctly." Critical thinking skills and social constructivist perspectives were hardly existent. He has many explanations for this situation. Teachers viewed learning English language as a tool for social mobility and not for critical examination. Because of the legacy of colonialism, English was the language of power, and learning the grammar to speak it "correctly" gave one access to that power structure. Colonialism taught native Shona and Ndebele speakers that they did not (could not) speak English properly. Natsa mentions other limiting factors of the classrooms, such as large sizes, poor teaching and learning materials, students' lack of knowledge of English as a first language, and insufficient teacher education of over half of the teaching force.

Natsa argues that the highly centralized curriculum that was exam-driven and bureaucratic discouraged discourse among teachers in critically examining the use of texts, the role of exams, and the meaning of critical thinking. In his research he found that teachers depended primarily on the national exams and textbooks to develop literacy goals (1994). As a result the curriculum continued to be greatly controlled by the British external examination system in the name of upholding legitimacy. Teachers rarely turned to the national syllabi for guidance. He also found that teachers rarely if ever engaged in an academic or

professional discourse in the schools about the meanings and processes of reading and writing.

K. Peter Dzvimbo was also pessimistic regarding the extent and influence of national reforms. He writes, "While the government, politicians, and Ministry of Education have advocated the creation of a teacher who becomes an agent of changing a capitalist socioeconomic formation toward socialism, the environment within which the teacher operates has not changed" (1988, pg. 92). He states that much of teacher training was still greatly influenced by the 1977 Teacher Education Guidelines that were developed during the racist Smith regime.

Like Natsa, Dzvimbo argues that examinations were a tool used to control creative thinking.

> "...testing and examinations still posit a serious problem in that some students are unable to pass the competitive scholastic examinations. Such an emphasis on examinations as a means of evaluating students' and teachers' worth tends to stultify innovativeness and group efforts in both students and teachers. In Zimbabwe, it has led to a problem in which teachers concentrate on drilling students to pass the examination instead of mastering concepts. The socialist principle of comparing students to a set criteria and a collective approach to knowledge rather than comparing students to a group and individualism need to be emphasized." (1991, pg. 302)

Dzvimbo criticizes the bureaucracy for having made it difficult for teachers to become involved in the communities. Teachers were expected to work, not only through members of the local community, e.g. church leaders, but also through a whole host of local governmental figures, e.g. local council members, school officials, party officials, members of health ministry, etc. He asserts that teacher education did not go far enough in providing teachers "with skills to enable them to handle the new role as innovator" (1988, pg. 92). Also, he argues

that the examination structure and the role of supervisors were more of a hindrance to creativity than encouragement of it. Other problems included: alienation, poor salaries, large work loads, lack of staffing in teachers' colleges with high student-to-teacher ratios, and a lack of indigenous educational materials. These conditions led to high levels of teacher burn out, discouragement of those most qualified to enter the field, and poor instructional support for teachers.

Both Zimbabwean researchers (Natsa and Dzvimbo) show that liberation ideology may have been in the minds of reformers, but the realities of the post-colonial education system made any significant change difficult. Much of Natsa's and Dzvimbo's criticisms revolve around the state's nation building efforts. While expanding education served all interests, the results were a higher level of bureaucracy and more control and standardization of exams and the education process. The state was also satisfying the popular demand for the type of education many Zimbabwean's had been denied in the past. By maintaining a "legitimate" education structure, the state adhered to interests of nation building at the expense of liberation ideology.

In their book *Education and Social Transition in the Third World*, Martin Carnoy and Joel Samoff (1990) relate these issues of difficulties in implementing a liberation ideology reform due to the political and economic conditions of a country. They look at contexts where countries were in the process of changing from a conditional capitalist (colonial) state to a transition state. While the former stage had an economy that was influenced by western countries and a free

market perspective, they use the term of conditional capitalist because the interest was extracting profits often at the expense of developing free markets. The latter stage reflected a state's striving for socialist ideals (liberation ideology). While they did not include Zimbabwe in their case studies, they did mention that it was a country that fit the criteria of being a transition state.

The authors describe the conditioned capitalist state in the realities and history of economic and political power and not in the ideals of free market. They argue that individuals in power were able to use a hierarchy of knowledge to guarantee their position in society. Schooling was used to reinforce the status quo where a few had access to power and the majority was trained to be passive and good consumers. Those in a revolutionary system attempted to focus on making the construct of knowledge accessible to the collective including those who had been denied access in the past, e.g. rural peasants. In a capitalistic society, schooling was viewed as a tool of mobility and the focus was on learning skills, and schooling in the liberation ideology was focused in creating "a new man."

Carnoy and Samoff question whether it is possible for a country to work for a collective good rather than individual consumption since the larger context of the world is dominated by powerful capitalistic economies. A tension grows out of the transition state's desire to grow in economic production and promote equity in political participation. While this is an essential question with which a state needs to grapple in terms of nation building, as mentioned above, the other theoretical perspectives come down on either end of the spectrum. They argue

that education systems in transition (ones that reflect a liberation ideology) were fundamentally more explicit in shaping a theoretical perspective because conditional capitalist systems needed people to buy into it only on an individualistic level of social mobility, i.e. "how will schooling benefit me."

While they were not overly optimistic about an education system's ability to implement a liberation pedagogy that would lead to the raising of the consciousness of the masses, there were some things they argued that education in this context tended to do. More people are brought into the political arena through education, the government develops a mass education system rapidly, knowledge becomes much more equalized, and the government increases its capacity to self govern with its development of local leaders. However, the authors argue that states tend to focus more on their desire for making good on their promises of economic growth and, in the name of efficiency, the state consolidates its power. The education system becomes more bureaucratic and hierarchical. Rather than promoting an education that raises peoples' consciousness, the state advocates an academic and technical education that is suggested by the free market ideology to create greater economic growth. As a result, the creation of knowledge remains in the hands of a few. They state that Freire's ideas are more often cited than used. And in the end, they suggest that liberation ideology gets compromised for the sake of nation building and the free market benefits.

In his comparison of Zimbabwe to Cuba, Dzvimbo (1991) points to larger social, political, and economic influences. His arguments are similar to Andre

Astrow's in *Zimbabwe: a Revolution that Lost its Way*. The policy of reconciliation, lack of land reform, and the whites maintaining economic power caused Zimbabwe not to transform the economy/society. For the most part, the white farmers kept the best agricultural land and black Africans remained in Communal Lands, which were the reserves they were forced into during colonization.

Dzvimbo argues that the whites were allowed to retain custody of a relatively strong economy while rural and the urban masses were never brought into the modern sector. Cheap labor continued to be exploited, and the highly stratified economic system changed little as a result of the revolution. A liberation ideology in education had minimal effects because the realities of the economic system remained an unfair distribution of power.

In the years shortly after the revolution, the government's primary focus was to expand the existing system rather than conscientization of the adult population by addressing the problem of adult literacy. The government's attempt to transform schools through Zimbabwe Foundation for Education with Production (ZIMFEP) was short-lived. Dzvimbo blames its lack of success on students having had to continue to write the same examinations from Cambridge. Once the veterans of the liberation struggle graduated, the new wave of students was not sympathetic to the idea of doing manual work when students in other institutions were doing "book learning" and getting decent jobs. Dzvimbo also points to the continuation of private schools as a factor for the lack of transforming the education system. Unlike Cuba, boarding schools were not

used by the state to help create "the new socialist person." Instead, private school continued to serve middle and upper class interests. While a few benefited greatly from the dominant perspective of the past, the new Zimbabwe state had difficulty convincing most people to adhere to a liberation ideology that was not linked to social mobility. Without a change in the political/economic structure, "book learning" continued to offer the best chance of individual advancement.

Zimbabwe Under Structural Adjustment – Neo-colonialism

In 1991, Zimbabwe adopted a new economic program – from African socialist to adhering to the World Bank's Economic Structural Adjustment Programme (ESAP), i.e., a free market approach. R.J. Zvobgo (1997) asserted that the socialist economic strategy of newly independent Zimbabwe "plunged the country into an economic nightmare" (pg. 43). While the government could no longer maintain the expansion of schooling (as well as other institutions), ESAP did not solve the nations' problems. Zvobgo (1997) argues that ESAP not only led to less money for education, student tuition fees, and thus higher dropout rates, but it also directly influenced the thinking of the education system. He continued in the same vein as Carnoy and Samoff, pointing out that while ESAP replaced past African-socialist, economic policies, it lacked an ideological foundation to give a vision to the education system.

Involvement with the World Bank and the International Monetary Fund (IMF) brought Western, technical advice. Zvobgo suggests that overseas college training, computer technology, and Western-sponsored reforms are a part of a

neo-colonialist relationship. The West controlled educational policies because Zimbabwe did not have the resources to compete with a developed reform industry. As a result, the education system never changed. "This explains why there have been no serious curriculum changes since independence. Zimbabwean education is not education for liberation but for the preservation of the status quo" (Zvobgo, 1997, pg. 72).

Globally, "The New World Order" came from the fall of socialism in Eastern Europe. The thought was that the only option left was the free market, i.e. negating any alternatives. Zvobgo and Samoff and Carnoy argue that the dominance of the free-market ideology was a dangerous influence. Assumptions went unchallenged as "truths of the markets." Also, because its ideology is so tacit (i.e. promoting individual interests), it does not get negotiated in a public forum. Conversely, liberation ideology requires an explicit, conscious vision of the future people want.

What happened to the other theoretical perspectives during neo-colonialism in Zimbabwe? While ESAP was a clear shift from liberation ideology to one of free-market, nation building and globalization continued to play a role. In terms of nation building, the state had to balance a support for greater production without becoming overly dependent on the West. As Carnoy and Samoff argue, the state needed to also maintain some levels of equity and participation to keep people in the country satisfied.

While the language used with liberation ideology was strong during the nation's early years, it had difficulties competing with the structures of the past

that allowed social mobility for a few. In terms of nation building, the ideal of a liberated Zimbabwe for everyone was a way to mobilize support for the national government. However, individuals were promised the lifestyle of the colonialists, and the state had to fulfill some of those promises if they were to be seen as legitimate. Also, a radical change in the structure of education would jeopardize the country's education system's legitimacy. In the name of nation building, the liberation fighters who struggled for the same educational opportunities had to be offered credible schooling.

From 1991 to 1999, the policy of the free market ideology did not have to address the same undermining influences that the prior liberation ideology faced. Social mobilization of a few was more consistent with the free market ideology. In the early years, students expected that the government would provide opportunities for them. With the free market way of thinking, those who failed to find a job could be blamed for their own lack of effort or skill. In terms of nation building, the country had to deal with the many educated citizens who greatly outnumbered formal employment opportunities. Leading people to believe that everyone had a realistic shot to individual progress, the state allowed the informal market (with few restrictions) to grow.

In the national discourse, there were few stakeholders who advocated for liberation ideology, and as a result, it no longer played a significant role in the debate on education. On the other hand, the stakeholders of free market ideology expanded their agenda without challenge. Eleven years was too short for Zimbabwe to develop institutions that reflected the liberation ideology. The

assumptions and realities of free market ideology went unchallenged, and as a result, the ideals of free market became distorted. The conditional capitalist institutions of colonial days were revitalized, and power structures became more hierarchical.

Zimbabwe Farm Invasions

The failure of the referendum of the new constitution in February of 2000 was the first voter setback for the ruling party ZANU (PF) in its post independent Zimbabwe history. With President Mugabe's tacit support, ZANU PF supporters under the guise of war veterans began an invasion of commercial farms (predominately held by whites) throughout the country. Land redistribution had been a key issue during the liberation struggle, yet little was done in that area. The government with Great Britain's support attempted to rectify the imbalance with a "willing buyer – willing seller" policy, but it had little impact for the larger population.

Tensions grew leading up to the June 2000 parliamentary elections. Over twenty people were killed through political violence during that time. Most of the victims were white, commercial farmers and their laborers or supporters of the newly formed opposition party, Movement for Democratic Change (MDC). The role of the central government in the violence has always been in question. The police remained amazingly silent on the crimes committed showing little effort to apprehend the perpetrators. To the present time, there have been no convictions for any of the murders and very few arrests. Mugabe issued a general pardon for political crimes during the period. With tacit government support, in April 2001,

the war veterans began to expand their invasions to industries in urban areas. Asserting to be settling disputes between employers and workers, war vets interrupted board meetings, took top level managers to ZANU PF headquarters, and demanded companies to reimburse employees who had been retrenched as long as six years prior.

The effects of the invasions and subsequent government policies have had great impact on the economy. Tobacco production, the largest foreign exchange earner, was hurt due to many of the commercial farmers being evicted. In 2000, there were 1,750 large-scale tobacco farms. The following year the number shrunk to a mere 400, and exports were expected to decline by 75% (Nyakunu, 15 October 2002). Supplies of petrol continuously were disrupted causing long queues at service stations and blackouts throughout cities. Agricultural production of winter wheat declined forcing the country to begin to import the crop in 2001. Coupled with a poor rainy season of 2001-2002, the country faced famine of six million people, over half of the population, and depended heavily on international food aid.

Leading up to the June 2000 parliamentary and March 2002 presidential elections, opposition party demonstrators in Harare and residents in high-density suburbs were beaten, kidnapped, and tortured by police, war veterans, and other ZANU PF supporters. However, the majority of the violence took place in the rural areas where the opposition was less organized due to intimidation.

A man who delivers *The Daily News* related his troubles to me when he attempted to go to his rural home in Mutoko for his uncle's funeral prior to the

March 2002 elections. He told me that upon arriving at the town center, ZANU PF supporters questioned him and searched him and his bags looking for a membership card to the opposition party. Contrary to their belief that all Harare residents are MDC members, this man indicated no desire to engage in political activities beyond casting his vote. Even though they did not find any evidence, they took this man to the house of the leader of the area's ZANU PF Youth Wing. He described how he was detained and questioned. His money, identification card, and the gifts (basic commodities) he had brought were taken, and he was threatened to be beaten. He explained how he was able to escape in the middle of the night but was unable to return to his rural home for several months. Many more similar cases have been reported in the independent press.

Schoolteachers and headmasters were also the target of much of the violence. The intimidation of teachers grew greatly just prior to the June 2000 parliamentary elections, but it continued afterwards. On 22 March 2001, *The Daily News* described how war veterans accused teachers of teaching MDC slogans and closed two schools west of Bulawayo.

> The war veterans harassed and humiliated them in front of their students and then forced them to abandon their lesson and flee to Bulawayo. 'They never gave us a chance to lock our houses they were very rowdy,' said a female teacher. 'Unless our security is guaranteed, it will be very risky for us to return.' (pg. 11)

During my visits to the schools around the region, most teachers related stories of war veterans' intimidation. They forced Auther (a student to be introduced later) to write a proposal for raising goats for them. All teachers had to be careful of what they said and to whom. Teachers, being better educated

than most rural people, were naturally suspect for being partial to the opposition party and often harassed. A newspaper article described how teachers were being forced to pay $Z100 for ZANU PF Women's League, $Z100 Mugabe's birthday celebrations, and $Z50 for Independence Day festivities (*The Daily News*, 4 April 2001, pg.1). In a study conducted by the International Union of Students, Zimbabwe was ranked as the most intolerant of students of all African countries (*The Standard*, 22-28 April 2001, pg. 3). During this period of intimidation, not much education reform took place on a national level. In a news analysis, Percy Makómbe states,

> In truth the Education ministry has produced more policies than it has been able to digest. Constant educational policy flip-flops have left teachers confused. In 1997 the Commission of Enquiry into education and Training was appointed. That commission, headed by renowned scholar, Dr Caiphas Nziramasanga, looked into the future direction of Zimbabwe's education system. The commission was appointed at a time when the country's education system was being criticized for being too academic and exams-oriented. No sooner had the nation digested the Nziramasanga Report than the government announced a new curriculum policy for primary and secondary schools which has now been followed by on foreign exams. (30 March 2001, pg. 12)

Makombe states that the issues that did get addressed were the shortage of qualified teachers and localizing exams and not more substantial issues of teaching and learning.

The need for determining a Zimbabwean identity was part of the language used for localizing the Ordinary (O) and Advance (A) level national examinations. However, the debate rarely followed such issues. More practical issues were highlighted. The Zimbabwe Schools Examination Councils (Zimsec) asserted that the standards would not be compromised and the country "will make huge

savings on foreign currency" (*The Herald*, 13 April 2000, pg. 9). It was unclear whether private schools – including the ones where Mugabe sends his children – were required to ban the British exams. Parents had voiced their dissatisfaction with the idea of compulsory "O" and "A" Level Exams (*The Daily News*, 27 March 2001, pg. 12). Also, Zimsec was accused of mismanagement on several occasions leading to a lack of funds and poor standards (*The Daily News*, 28 April 2001, pg. 2, and *The Herald*, 30 October 2000, pg. 7).

In terms of the other issue being addressed, the Ministry of Education, Sport, and Culture vacated their role of assigning new teachers to schools. The hiring of teachers was directed to a more local level, and teachers applied to the schools/districts of their choice. As a result, teachers migrated to urban areas, leaving rural areas with shortages (*The Herald*, 21 January 2000). The problem grew in 2001 when the government dismissed many of the temporary teachers mostly from remote areas who had not met the required qualifications (*The Daily News*, 14 February 2001).

During the same period, the Ministry of Higher Education and Technology cut funding for students at colleges. Students had been receiving small government stipends with food and shelter being provided free of charge. With the budgets of 2000, catering was no longer included, and as a result most colleges resorted to some system of privatization. Demonstrations including hunger strikes, rallies, boycotts, and violent protests erupted at colleges around the country. At Hillside Teachers College, police fired live bullets to disperse the

students (Mathuthu, 28 November 2000). And students in two colleges in Masvingo were reported to be starving (Chikede, 16 October 2000, pg. 16).

At Belvedere Technical Teachers' College, like many of the other colleges, students were unable to afford the $Z6000 that they needed to pay for food. Students rallied, boycotted classes, and several were reported to be sleeping out in the open (*The Daily News,* 13 September 2000). Students complained about not having a choice in purchasing the meal plan and the lack of transparency in how the figure of $6000 was determined. Rather than truly privatizing the catering, the college made arrangements with a local caterer to retain college employees. After a couple of weeks of protests, college administrators returned the money collected to the students.

A string of protests at universities ensued at the beginning of 2001. Students at Catholic University of Zimbabwe demonstrated against mismanagement when their school fees increased from $Z60,000 to $Z90,000 (*The Daily News*, 24 April 2001, pg. 3). University of Zimbabwe (UZ) students cited an increase of fees from $Z3,000 to $Z30,000. Two students were killed as a result of police crackdown on protesters at UZ. Students began to attack cars of "sugar daddies" after a woman student committed suicide. Women have allegedly had to turn to prostitution because they were unable to live on the government stipends (*The Daily News*, 9 April 2001, pg. 1). As with other student protests at the university, the riot police beat the students with batons, fired teargas, and arrested many (*The Daily News*, 10 April 2001, pg. 1).

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Role of Stakeholders' Theoretical Perspectives in Present Day

In their introduction, Nicholas Burbules and Carlos Torres (2000, pg. 4) ask the question: "To what extent is the educational endeavor affected by processes of globalization that are threatening the autonomy of national educational systems and the sovereignty of the nation-state as the ultimate ruler in democratic societies?"

In a personal interview, Thompson Tsodzo (2002), the Permanent Secretary for the Ministry of Education, Sport and Culture, gave an example of global forces that he viewed as interfering with the state's national policy. He refused US-donated condoms being made available in schools. He argued that abstinence was a part of culture, and that having condoms available would suggest that the state would be consenting for youths to engage in premarital sex. However, people not discussing sex issues openly, especially between the generations, is often the case. It is doubtful that abstinence is cultural in a society where AIDS/HIV is growing rampantly, infecting an estimated quarter of the population.

Informational technology is another globalization process that the state is trying to negotiate in a way to maintain local authority. Tsodzo (2002) asserts that his ministry is in favor of technology, especially when it is being donated by the UK. However, his support for the Internet is limited. He argues against Africans being only consumers of the information and not producers of it. This criticism is justified in the light of Western dominance in the Internet, but his approach to addressing the problem leads to more state control rather than

supporting individuals to be writers/organizers of information. He advocates for a council to restrict information so that it is appropriate for the national context. Such a body would be contradictory to the ideals of the free exchange of ideas of the Internet.

A more contentious issue is localizing the "O" and "A" level exams. There could be much political significance in the state exerting independence from the formal colonial power. The exams have had a long history of being more appropriate for British citizens than Zimbabweans. Other than political-economy and history courses of the past, there has been very little discussion about altering the syllabi. Zimbabwean exams are extremely similar to the British ones. The primary factors motivating the change come from the foreign currency crisis. Stories of schools requiring students to pay their exam fees in foreign currencies circulated throughout the country (*The Herald*, 24 January 2000). With the economic pressures – including the fuel shortage – using foreign currency reserves for exams is not a priority for the government.

The globalization issue being debated is one of legitimacy. Ironically, the Zimbabwe education system is considered legitimate because of its wholesale adoption of the British education system of the past. The Cambridge Ordinary and Advance Level Exams have much more global recognition than the Zimbabwe Schools Examination Council (Zimsec) Exams. Parents who can afford to send their children to private schools understand very well the significance of international standards, especially during the current time when so many young people are leaving the country for opportunities overseas.

The government exerts much effort in maintaining control, yet little significance is directed towards the curriculum and pedagogy. When asked in a personal interview (Tsodzo, 2002) about such reforms, the Secretary of the Ministry of Education discussed a return to a colonial "F-2" system that focused on practical work and production. Rather than using past terms of "productive workers" or "education with production", the ministry is using language of "science" and combining "theory and practical." Tzodzo also discussed "teaching patriotism." As he noted, these reforms have been recycled throughout the country's history. To combat an overly "academic" education system, the government has often pushed for more vocational/technical/practical education. In the past the reform has held very little interest for students, and there is no evidence that the current case is any different.

When asked what were the major issues for the Ministry of Education, Tsodzo (2002) identified discipline of students and teachers. While discussing the issue he did not relate the state's desire to suppress any opposition to its rule; instead, he returned to culture as the justification.

> We [The Ministry of Education, Sport, and Culture] are also saying it is cultural for our students to obey regulations. It is to be a part of a civilized community. If you do not obey rules, you are on your own...you are a rebel. It is very un-cultural.

He continued to explain what did happen to those who did "rebel". "There are very few rebels in our culture. They were there, but they were sunk. They were tossed aside."

Tsodzo's views are a demonstration that the state does not tolerate dissention. Administrators, teachers and students thought to be speaking out

against the ruling party are "chased away" from schools. While it is the war veterans and party supporters and not ministerial inspectors involved, a national educational policy is being implemented. Teachers know what subjects to avoid in their classroom. They also are aware of the possibility of a disgruntled student or former student complaining to the war vets.

It is the riot police and not war vets who make their presence known on the University of Zimbabwe's campus. An example of the ferocity of the police beating students is when the police entered the dorms at night with tear gas and batons on 9 April 2001. One student was killed after he was allegedly assaulted by seven riot policemen (Mudiwa, 10 April 2001, pg. 1). The force used by the state suggests that it is not open to dialogue and the airing of opposing views.

The current situation could be viewed in terms of various stakeholders advocating for different agendas of: globalization, nation building, free market, and liberation ideology. Again, the dominance of one theoretical perspective and the marginalization of the others has allowed for the ideals of the dominant one to become distorted.

If there was equilibrium of all these forces at work, reforms could be effective. In the face of globalization pressures, a localized curriculum could help schools develop a national identity. The economic reality is that the government can no longer afford to pay another country to set exams and subsidize many of the expenses of higher education. Using free market concepts, resources could be used more efficiently while giving students and teachers more freedom of choice. In terms of liberation pedagogy, stakeholders of teachers, students,

administrators and community members could join in a dialogue about what is meaningful schooling and how to bring it about.

However, there is no balance of these forces. Liberation pedagogy or any type of pedagogy remains excluded from the debate. In the current period, questioning and proposing opposing ideas is viewed as a direct challenge to the ruling party.

In terms of globalization, the Mugabe regime has alienated itself from most countries in the world. Sanctions from the European Union and the United States restrict many government officials' travel and financial dealings. Mugabe has accused the British Prime Minister of trying to re-colonize Zimbabwe. In a speech given on 12th of August, 2002, the President stated, "Each one of these lives will remind you with the harshest of language that there is no price big enough to fetch this Nation; no gold, no silver, precious enough, to buy its sovereignty. We are not for sale; Zimbabwe is for Zimbabweans; we are not for the highest bidder, indeed, we are not for the British bidder."

In the same speech, Mugabe continued:

> Britain, Europe and America can impose sanctions, or do worse devilish things. Let Europe banish all holy men who obey their conscience and stand by our cause; let Europe banish all the disabled; banish all wives, banish all children, all brothers, all sisters, all cousins. Let Europe's list grow by another fifty, another hundred, another one thousand, another million, grow by all but the stooges they sponsor here, stooges who gladden them. But we shall not budge; we shall not be deterred on this one question. The land is ours! Shame to them!" (12 August, 2002, ZANU PF Homepage).

Mugabe's language suggests that the Zimbabwean state views the West as an enemy, and those who oppose Mugabe's policies and tactics are termed

as "stooges" of western powers. This rhetoric attempts to invalidate views in opposition to that of the state.

Mugabe also blames the Western press for the negative images in the country. At the September 2002 UN World Summit in South Africa, he clearly told the Western powers that their involvement in national issues was unwelcome (Swarns, 2002). This speech was given at a time when Zimbabwe is greatly dependent on Western food aid.

Economic issues are discussed, but there is little evidence of the state following a cohesive plan. Witness Chinyama (20-26 March 2003, pg. 32) has criticized the state's National Economic Revival Programme (NERP) as being unrealistic. The Minister of Finance had projected double digit inflation for his 2003 budget; however by March 2003, the annual rate has reached an all-time high of 220.9%. The official exchange rate has remained at fifty-five Zimbabwe dollars to one US dollar since October 2000. In March 2003 the exchange rate for exporters was increased to 800 Zimbabwe dollars to one US, however, the parallel market offers a rate of 1400 Zimbabwe dollars to one. Members of the government-business-labor Tripartite Negotiating Forum (TNF) have advocated for better fuel procurement and pricing, exchange rates, and a lifting of price controls with little success (Dzirutwe, 20-26 March 2003, pg.5). Most basic goods such as bread, cooking oil, and mealie-meal can no longer be found on the shelves.

The World Bank and IMF have severed ties with the country. By May 2002, Zimbabwe owed the Bretton Woods institutions over $US 118 million. A staff reporter of the *Financial Gazette* forecasted dire effects.

> The defaults on the external loan commitments have also cost Zimbabwe crucial economic aid worth several million American dollars, triggering a crippling balance-of-payments crisis and severe shortages of fuel and other essential commodities." (2-8 May 2002)

A United States Department of State report points to Mugabe and his ruling party as the cause of the crisis in the country.

> Zimbabwe is in a state of crisis today because those who govern the country have systematically undermined the rule of law. Through their actions, President Robert Mugabe and his colleagues in the ZANU-PF party have placed themselves above the law; rather than serving the state, the state now serves their personal interests. Although they have employed the rhetoric of liberation to portray their actions as a defense of the Zimbabwean people, their real agenda has been and remains the defense of their own privilege. (12 March 2003)

The report identifies government policies as undermining the judiciary, cracking down on political parties and civil society organization, suppressing the independent media, diverting food aid, disrupting of farming, and intimidating rural people.

The invasions of large-scale, commercial farms and industries have attacked the income generating backbone of the country. Coupled with a drought, agricultural production decreased greatly for most crops. For instance, production of Maize fell from 810,000 tons in 2000 to 80,000 in 2003. Between 2001-2002 wheat fell from 280,000 tones in 2001 to 115,000 in 2002. However, during the same period, barley production increased from 32,000 to 50,000 tons.

The price set for barley was $Z100,000 a ton compared to wheat at $Z70,000 (Chabarika,19 March 2003, pg. 16).

Maintaining high levels of intimidation expends much of the nation's resources. In his January 2003 economic analysis, John Robertson discusses how the government expenditures have increased partly in order to pay war veterans and party supporters.

> Expenditure has averaged Z$1 billion a day this year and will average more than Z$2 billion a day next year. As tax revenue averaged only Z$726 million a day this year and will average about Z$1 400 million a day next year, government has had to borrow the difference. In the coming year, domestic debt will increase by an average of Z$600 million a day, and possibly much more if the tax revenue sources shrink in the coming months.

As a result the government cannot sustain the funding for education, health and social services that it allocated in the past.

According to the United States Department of State's report (2003), the primary interest of the state is to ensure the perpetuation of the ruling party. Nation building becomes the only perspective the state considers and, as a result, it has taken a distorted role – rather than building unity and national identity, the state is attempting to hold on to power by suppressing any opposition – real or imaginary.

In 2002 The Mugabe regime replaced the Law and Order (Maintenance) Act that had been established during the Smith regime to combat against the liberation struggle. The new Public Order and Security Act (POSA) maintained laws that repressed oppositional voice. In a statement published on their web

page, the Legal Resources Foundation (2003) published a summary of the act. POSA makes it illegal to:

1.) Publish or pass on a statement which is untrue and which may incite or encourage public disorder or violence; or adversely affect Zimbabwe's defense or economy; or undermine confidence in the Police Force, the Defense forces or the Prison Service.
2.) Publicly criticize the President.
3.) Hold meetings (in public or in private) that are likely to disturb the peace.
4.) Say anything in public that may make people hostile, contemptuous, or disrespectful to the police.
5.) Hold public gatherings without at least four days advance notice to the police.
6.) Not carry an identity document in public places.

The police can:

7.) Order a dismissal of public gathering to maintain public order.
8.) Prohibit a public gathering if they believe, on reasonable grounds, that the gathering will cause public disorder, and they may disperse illegal meetings and demonstrations.
9.) Establish a cordon to contain, or protect an area from, any public disorder or public violence. A written permit from a police officer is needed to leave the area.

Many parallels can be drawn from the past. The government of 1962–1979 attempted to use education to maintain white racial hegemony, while the opposition demanded more access. Similar to the past, the state's actions lead to a limiting of a national debate. Substantial pedagogical issues do not get addressed. Starting with the run up to the 2002 Presidential election, schools became field grounds of politics, especially in the rural areas. Schools may have been a forum for questioning and challenging the government or only an imaginary threat of it. No matter how justified this perception is or was, the results are the same – teachers and headmasters are being victimized.

While Tsodzo (2002) asserted that there was only one legitimate case of intimidation brought to the Ministry of Education, the Progressive Teachers'

Union of Zimbabwe reported much different figures. They accounted for 20,994 teachers kidnapped and later released, 15,659 assaulted or harassed, 14,442 displaced, and 4,926 given death threats between February 2001 and April 2002. Also 107,503 teachers were forced to pay protection fees during the same period (Mangwende, 2002, pg. 1). Teachers' pay had been reduced greatly due to inflation. They did not receive the same increases awarded to other civil servants, as a result, a newly trained teacher grosses $Z23,716 a month. After taxes, the figure was reduced to $Z10,666, which is below the poverty line for the nation (Staff Writer, *The Financial Gazette*, 25-31 July 2002, pg. 2).

The state's policies are focused on maintaining control to the extent that the other foci of education are neglected. Because the agenda is so singularly focused, there is no space in the national debate to attend to curricular and pedagogical issues central to education. Instead, the education issues that do come up revolve around maintaining the party's hegemony and not teaching and learning. For example, in May of 2002, the Education and Culture Minister Aeneas Chigwedere announced a common uniform for all of the nation's schools. After an uproar from parents unable to purchase new uniforms, the minister backed down (*The Financial Gazette*, 30 May-5 June 2002, pg. 2). However, he did not yield with his other reform, to change the names of all schools with British names.

A further example of the ruling party's focus concerns a major reform coming from the Ministry of Higher Education and Technology. This reform requires students to engage in national service at The Border Gezi National

Youth Service Center. The center indoctrinates school-leavers into the ideals of the ruling party. Graduates, known as "green bombers", have been accused of "wreaking havoc in the country in the run-up to the presidential election held in March, manning illegal roadblocks, intimidating, assaulting and raping suspected supporters of the opposition" (Mudzingwa, 24 June 2002, pg.1). In June of 2002, the state ordered all teacher-training colleges to reserve enrolment placements for the Border Gezi graduates, regardless of their qualifications.

Overall, education's role in the national, political debate has been diminished. There are several reasons for this. First, in the past, education was the singular credentialing process for obtaining employment. It was common knowledge that a student needed passes in five "O" level subjects to be eligible for most jobs. That situation changed with the influx of school leavers at the secondary level. Zvogbo writes, "Important lesson that was learnt is that more education does not mean more jobs" (1994, pg. 95). School-leaver unemployment was marked at 200,000 each year prior to the economic decline starting in 2000. In terms of credentialing, social mobility comes from having a degree, diploma or, in Zimbabwe's case, the passing of five Ordinary Levels. Phillip Brown (1997, pg. 741) describes how education expansion leads to credential inflation. Today, there are so many school leavers with O'Levels that the credential loses its value. Also, in the age of globalization the nature of work has changed. If there was international investment, many jobs would be either de-skilled and require minimal formal education (e.g. working in an automated factory) or highly skilled requiring advanced degrees (e.g. working for an

international NGO). The result is that completing five "O" levels does not carry the significance it once did.

Second, for the most part access to schooling (primary, secondary, and tertiary) has been achieved. In 1979 there were 2,401 primary schools and 177 secondary schools. A decade later, those numbers increased to 4,504 primary and 1,506 secondary schools (Gatawa, pg. 18). There is no side in the political debate that is overtly attempting to limit access to education. It has become a non-argument. Even with the tensions with university students, the government has opened new universities in the past two years – Midlands State University, Bindura University, and Masvingo University College. Also, private universities such as Africa University in Mutare and Great Zimbabwe University in Masvingo, distance education with Zimbabwe Open University and University of South Africa have become an option for students with resources.

Third, liberation and education were thought to go hand in hand. In the past, secondary schools and universities were sites where the seeds of revolution were sown. Today, schools no longer play such a role due to repressive acts from the state. Instead, political voices come from party supporters and war veterans.

An overriding fourth reason education is no longer central to the national debate is that the state no longer views education as vital in promoting its interests. Chenjerai Hove (2002), a celebrated Zimbabwean writer, wrote how education has become the victim of government actions. He does mention the school closings and the attacks on teachers, but his focus is on how the state

never organized a serious literacy campaign in the country. ZANU (PF)'s support comes from the rural areas, where illiteracy is the greatest. Instead of trying to develop the population, Hove accuses the government of maintaining intimidation to keep a stranglehold on the people.

A Microcosm of National Politics – Belvedere Technical Teachers' College

On a micro level, the student protests in second term of 2001 at Belvedere Technical Teachers' College reflect the larger national context in terms of the various theoretical perspectives. The issue of the college no longer providing free catering services to the students could have been a part of a movement towards free market policies. Students paying their expenses and being given opportunities to engage in income generating activities at the college could have been a part of a sustainable plan. In terms of liberation ideology, the administration could have used the opportunity to engage in a dialogue with students regarding power relations at the college, and new possibilities could have been created. Using ideas of globalization, the college could have attempted to build ties with educational institutions in other countries to access resources.

Rather than eliciting other perspectives, the administration reflected the state's policy of attempting to maintaining control of the situation (i.e. nation-building) at the expense of dialogue. Privately, many lecturers asserted that even though the administration was acting with good intentions of trying to solve a problem under time pressure, stakeholders with various interests should have been involved to create a lasting solution.

Administrators made arrangements with a local caterer to retain employees and provide food for students cheaply. At the time the solution seemed reasonable; only hindsight revealed flaws. Students voiced their displeasure because they were excluded from the debate and they had no choice in the matter – they had to purchase a meal plan for $Z6 000 for the term. For several days, students boycotted classes and held rallies demanding "transparency" in the decision making process.

Fortunately, BTTC's resemblance to the ruling party only went so far. Many lecturers were quick to listen to the students and gave their support in addressing the administration. Unlike the state, the college administration showed good intentions. They allowed lecturers and students to question the policy, and in the end many stakeholders were involved in creating a solution that worked for all. The college reimbursed students for the food that was not eaten, and students were able to pay for individual meals.

This situation at Belvedere did not elevate to a level where an amicable solution was out of reach. In their argument for school choice, Chubb and Moe (1990) demonstrate how parents' and students' voices in debates of what should happen in their schools get drowned out when issues get politicized. More powerful stakeholders such as politicians, union leaders, and lobbyists bring issues to a level where those involved on the ground level are unable to participate in the debate; that is, the voices of local stakeholders often get lost when the debate escalates. Easily, the food issue at BTTC could have drawn in more powerful players and the dialogue could have become a more politicized

issue. One side reflecting the interests of the Ministry of Higher Education could have pushed the issue to one of supporting the state, and another side reflecting student unions and opposition parties could have directed an opposing side of demanding a change at multi levels of government. The voices of college students, lecturers, and administrators might not have been heard and the problem might not have been addressed. However, the dialogue did happen on the college level and the issues were resolved.

Like most issues at a local level, those making policy decisions at BTTC were not distant from those affected by it. After the initial confrontation, the administration allowed space for other policies to be negotiated. No one perspective dominated. Because the stakeholders at BTTC had the freedom/room to allow various possibilities they were able to engage in a dialogue with others. Lecturers, students, and administrators were constantly engaged in the debates, and each was supported in expressing views even if they were in opposition. Morning teas were often battlegrounds where ideas and views got aired. Through the dialogue, an amicable solution was created and the college got on with its mission of teacher education.

However, the college was not immune from national policies. On 21 May 2001, Nkululeko Sibanda (pg.6), the president of Zimbabwe National Association of Students' Unions (Zinasu) called for a national demonstration against privatization of food services and inadequacy of Vocational Training Loans (VTLs). The following week students from colleges around the country, including Belvedere, began boycotting classes, marching into towns, and protesting.

Belvedere students reported being tear-gassed, beaten, and barred from leaving campus during the process, and their concerns were never heard by the Ministry of Higher Education and Technology.

On the national level, the education debate excluded most pedagogical issues. As a result, the college was left to its own devices to determine how best to promote teaching and learning. In the following chapters I argue that many of the qualities needed to make education reforms effective existed at Belvedere Technical Teachers' College, particularly openness to dialogue and commitment to work together.

More Questions

If meaningful reform can happen on the micro level in spite of a supportive national context, what external forces are important in assisting them? Without a positive national context, what is the hope for a micro level reform having an impact on the larger education system?

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CHAPTER 3
Action Research – Methods Reflecting Theoretical Perspectives

Posing the Questions

Assuming the premise: educational reform in teaching and learning should include a collective negotiation which includes various views/agendas from various theoretical perspectives. Is it possible for action research to create a forum for this negotiation to take place on a micro level (individual teachers in classrooms)? On a macro level (Belvedere Technical Teachers' College or national level)?

Introduction

Action research is a central theme in my research. The Curriculum Depth Study (CDS), a research study students do while on teaching practice, was the focus of the study. The students were to identify a problem in their classroom, find ways to address it, and reflect about the process – the basic tenets of action research. In conducting my research I also used aspects of action research, i.e. working with the Professional Studies (PS) section at Belvedere Technical Teachers' College (BTTC) to try to improve the way lecturers support and challenge students in doing the CDS. I collaborated with various lecturers, students, and administrators in reflecting about the problems revolving around the CDS, developing ways to address those problems, and dialoguing throughout the process.

In this chapter, I examine action research in the context of Zimbabwean, Southern African, and Western countries' literature. While I find that the national dialogue has been very limited, i.e. very few articles have been published describing what it means to engage in action research in a Zimbabwean context, lessons regarding teacher education can be learned. Two key points are: 1) a conducive environment is needed to make action research effective and 2) action

research can be a centerpiece of reform that assists teacher educators in rethinking and making education more meaningful.

Action Research is the current buzzword in many educational circles. While it was introduced in the 1940's, in the past decade, action research has become a worldwide trend for programs in teacher education. Torres (1995) argues that action research is sweeping the world as an effective method of teacher education and transforming classrooms. The term is passed around with its many promises of teacher reflection, liberation, critical consciousness, and problem solving. Without a dialogue of what action research means for the Zimbabwean context of teacher education, action research simply remains jargon.

Programs in Zimbabwe have begun to implement action research projects in various capacities. For the past six years Belvedere Technical Teachers' College (BTTC) in Harare has required students to complete a Curriculum Depth Studies (CDS) project where they pursue an in-depth study of an aspect of learning in the classroom while they conduct their teaching practice[5]. At the beginning of the first CDS Workshop (1999) many lecturers were uncomfortable with action research being the favored approach for the CDS. Since that time, together college lecturers have developed a more clear vision of what action

[5] Student-teachers of academic subject areas engage in teaching practice (TP) for one year while student-teachers of vocational/technical and agricultural subject areas engage in teaching practice for one trimester of the school year. After TP, they complete the writing of the project at college before graduating.

research means for the college. Through dialogue it was discovered that most of the disagreements were over jargon and terminology and not the ideas.

Even though most teacher education programs in the country require students to complete a research project that resembles action research, there is little acknowledgement of this trend in the Zimbabwean literature. Ndamba (1999) quotes Professor Gebeda, "Action research does not seem to be understood well yet. This in not unique to Nyadire [college] but general in tertiary education at this stage" (pg. 29).

While much has been written about the implementation of action research in general, very few articles are written about Africa in general and Zimbabwe in particular. Two authors, P. Pashapa (2000) of Mkoba Teachers' College and G. T. Ndamba (1999) of Masvingo Teachers' College, have advocated for action research to be the approach used for the CDS. These authors do give a clear explanation of action research in general, however, I have found no account of what it means to do action research in a Zimbabwean context.

What is Action Research?

Action research is different from most of the other kinds of research in its open approach. In traditional research approaches, access of conducting research is closed; it requires special university training. Once trained, the researcher is considered "an expert", and becomes distanced from those s/he is working with in the field. Action research, or teacher research, respects the teacher as an expert, not because s/he has any secret knowledge and skills, but because of his/her role in the classroom. S/he is most aware of what is

happening in the classroom, why it is happening, the significance of the actions, and s/he is the best position to effect change. The particular methods of research design, data collection, analysis, and write-up varies depending on the context and the researchers' aims and interests. Rather, the factors that distinguish action research from other approaches to research are:

1. The teacher examines his or her own practice
2. The teacher attempts to create change to improve the learning/teaching situation

Most good teachers naturally do action research; they identify a problem or issue in their classroom that interests them, examine it in depth, and attempt to implement solutions. As in doing any research, the researcher is explicit about what s/he does in the process. The intention of action research is not to create experts who can tell others what to do – it is to create teachers who reflect deeply on their own practice to make it better.

There are different levels of action research. They include:

1. Technical / trying to fix a particular element of teaching/learning
2. Changing the structure of teaching and learning
3. Political / making connections between what happens in the classroom and the larger socio-political context

In practice, it is difficult to distinguish the various levels. Something may seem technical (e.g. giving girls more wait time to be able to answer questions), but it reflects a philosophy of teaching that produces a particular environment (e.g. giving equal opportunity to succeed). And as Paulo Freire (1970) points out, everything is political, e.g. the belief of what is fair and just for girls. However, often the deeper issues are not explicitly addressed.

Learning from African Experiences

There has been relatively little written on action research taking place in Africa. In Monk's (1997) review of literature of in-service teacher development in Sub-Saharan Africa for the time period of 1983 to 1997, he identified only two articles that referred to action research – both being written by the same author (Walker, 1994 and 1993). Van der Wethuizen (1993) discovered that the South African Journal of Education had never published an article written by a teacher nor one using action research.

More recently, there have been articles written about conducting action research in other countries in the southern African region. Below are examples.

Table 3.1 – Articles of Action Research Taking Place in Southern African

Journal Reference	Author/Researcher	Context/Cohort	Topic and Issues
Stuart et al (1997)	The Lesotho Action Research Group (LARG)	Team of secondary teachers in Lesotho	Student passivity – "Challenging students will encourage them to develop thinking skills" (pg. 171). Students were included in conducting the research project, e.g. organizing field trips, examining teacher/student talk.
	Mahlape Morojele	Primary Teachers' Certificate Course at National Teachers Training College in Lesotho	Higher order thinking skills of students – "Students show a lack of higher order skills such as comprehension, application, analysis, and synthesis. Students believe that knowledge is closed or fixed; it is a thing which they are given, rather than an exploration in which they can take part of" (pg. 183).
	Pulane Lefoka	District Resource Teachers and National University of Lesotho	Self-reflection skills for primary school teachers.

Zeichner et al. (1989)	Alina Amukushu	Teacher Education in Namibia – B-level course for 34 Namibian educators requiring action research – organized by University of Umeå in Sweden	Created a reading corner to motivate students to read in their mother tongue
	Michael Ochurub		Contradictions in calling for teacher involvement in curriculum development and the reality of excluding teachers
	Peggy Shilamba		Attitudes of students regarding study skills
	Miriam Muukenga		Problems students had using English language at Ongwediva College
	Benthsai Uakumbua		Teaching of Otjiherero language – being "bastardized through translation form European languages" at Windhoek College
	Scholastika Hausika		Difficulties of using English among primary school teachers in the north.
Van der Wethuizen (1993)	MEP	Mathematics Education Project at University of Cape Town, S.A.	To improve teaching strategies of primary and secondary school mathematics teachers
	M. Walker W. Flanagan	Primary Education Project at University of Cape Town, S.A.	Feasibility of using action research to assist teachers in improving schools
	P. Naidoo	Science Education Project at University of the Witwatersrand, S.A.	Assisting thirteen high school science teachers to improve the syllabus in three "black" schools in Natal
	Cowan, Davids, Savahi, Brown, Papier, Najjaar, Isaacs, Hartman, Cleophas, Thuynsma, Van Louw	Masters in Action Research Project at the University of the Western Cape, S.A.	Research work as a part of a master's course.
Van den Berg and Meerkotter (1993)	Soweto Parents Crisis Committee, National Education Crisis Committee, People's Education Committee		Education change for a new South Africa. To redirect education struggle from the streets to the classrooms.
Stuart and Kunje (1998)		Teacher training in Malawi	Teachers found the process useful, but support from facilitators was vital
Mokuku (2001)		A program of environmental education workshop to help Lesotho science teachers	Reflecting on the meaning of teaching environmental literacy

Important insights for a Zimbabwean context can be drawn from these studies. For instance, Mokuku (2001) found that teachers were reluctant to move out of their preconditioned traditional role of teacher to use a more dynamic, constructivist approach. He also discovered that there was not a culture of outside reading and professional development in many schools. Similarly, Stuart et al. (1997) question whether action research is appropriate for an African context – where most of the education systems are hierarchal and bureaucratic and there is not much support for teacher professionalism. Van der Wethuizen (1993) points out that in many places teachers have not been encouraged to question and attempt to influence change in the classroom. He states, "The lack of teacher initiated work is indicative of the extent to which teachers in South Africa are disempowered" (pg. 13).

Morojele (in Stuart, 1997) also considered the importance of cultural norms when she queried, "Some student teachers showed the potential for using cognitive skills ... But why were they not applying these skills? Was it because their education – or perhaps cultural norms – had not encouraged them to question and analyze?" (pg. 189).

Stuart and Kunje (1998) argue that action research is possible in an African context, but supports are necessary to make it effective. The theme continued from the earlier article; "One should not lose sight of the fact that action research has its own demands which may conflict with the day-to-day operations of the college. For example, with teaching and learning that is

examination-oriented, tutors may not have sufficient time to follow up on issues identified in various cycles" (Stuart, et. al. 1997. pg. 187).

However, supports do not come without their own complications. Van der Wethuizen identifies most often supports come from tertiary institutions or non-government organizations. He argues that the interests of the teacher/research are often compromised by the larger body's agenda.

The success of action research can be measured in a variety of ways. Zeichner et al. (1988) claim, "Although in several cases the research did not result in concrete solutions to the problems studied, but to a deeper understanding of the researcher's situation, all 6 of these action researchers took an important step in becoming active interpreters of the broad principles underlying the educational reforms" (pg. 196). As an example, Pulane Lefoka (in Stuart, 1997) did not have success at first. She states, "As teachers engaged in this [first] stage, we observed that they focused on students instead of their own practice or on instructional problems... emphasis onto self-reflection and self-evaluation in solving classroom problems" (pg. 189). However, she describes how the teachers did take steps towards greater reflection.

While none of the authors suggest that action research will solve all education problems, Stuart et al. (1997) continue to advocate action research as a tool for social change in South Africa. They argue that it supports teachers "to take some control over their own practices and change it" (pg. 166). Van den Berg and Meerkotter (1993) also describe how action research has been used as a counter-hegemonic tool against apartheid education. Changes come in many

different forms, and action research can take various forms in different contexts and be effective.

Learning from Western Experiences

Learning lessons from the West does not imply blindly accepting western reforms part and parcel. Bruce Fuller (1991) describes the effects experienced when a developing country adopts a Western system of schooling and its way of thinking. Institutional theory explains that people have a general view of what schooling should be – not because it serves any particular purposes – but because it is simply an institutional norm. For instance, what is a classroom without desks in rows, and a chalkboard? Teachers, students and administrators are expected to act in a certain prescribed manner. The purpose of using cases from the West is to critically examine what is being done – not to copy, but to learn lessons so Zimbabwean teacher education institutions can selectively choose ideas worth developing within the context of their own programs.

Current literature has numerous examples of teacher education programs that have used action research to promote deep, reflective thinking. What follows are a few that provide insights into what it means to promote action research as a part of teacher education.

McEwan et al. (1997, "Learning to teach through Action Research") attempted to create a different approach to the student teaching practicum through means of "infusing such elements as critical inquiry and collaboration into the experience" (pg. 47). Using a team approach, the classroom teacher, a university professor, and two student teachers collaborated in planning, teaching,

and learning from students. They met weekly and developed openness and trust, a common language, and a climate of critical reflection and reflective awareness. Clearly, the endeavor required commitment, time, and a willingness to trying new ideas. The researchers were challenging the traditional view of teaching practice where "the implied message is that the student should learn to do as the teacher does" (pg. 49). Two years after the study, members of the team have maintained the dialogue – "We still communicate, offer each other advice, and share new ideas. It's amazing" (pg. 55).

Kosnick (2000, "Looking Back: Six Teachers Reflect on the Action Research Experience in Their Teacher Education Programs") described how she designed a teacher education program that supports new teachers to engage in action research. "In order to develop the action research process, we modeled a collaborative style of work, interconnected all assignments, team-taught, developed evaluation rubrics for the integrated assignments, and planned various modules spanning across courses" (pg. 134). She showed how her program gave students opportunities to: 1) develop a personal philosophy of education in practice and principle, 2) attempt something different in their teaching, 3) collaborate and create a community of inquiry, and 4) become an expert in a specific area.

Grimmett (1996, "The Struggles of Teacher Research in a Context of Education Reform: Implications for Instructional Supervision") discussed issues of facilitating action research in British Columbia in terms of struggle (intellectual, moral, personal, social, and political). To support teachers' struggles towards

professional growth, he identified important elements: a trusting environment, collaboration, and the teacher viewing their role as protagonists in addressing key issues of learning. "In the final analysis, the teacher research process appeared to give teachers permission to create spaces in which the experiences of their daily lives as classroom practitioners could be detailed in all their complexity" (pg. 43). He continues, "Teachers take pains to address the vexing questions and perplexing dilemmas inherent in the daily messiness of practice" (pg. 45). He puts much value on collaboration whereby colleagues challenge each other's thinking and assumptions – "The collaborative nature of the inquiry process opened new perspectives on classroom action. It enabled teachers to see their students through different eyes. Also, it provided them with different ways of looking at central aspects of their role as teacher and facilitator" (pg. 48).

Keating et al (1998, "A Collaborative Action Research Model for Teacher Preparation Programs") describe efforts at California State University San Marcos to implement a teacher preparation program that supports action research. They developed the program with the goal of producing reflective and critical thinking teachers who are problem solvers and researchers. Two key elements to which they continually made reference were: collaboration and using reflective journals/portfolios. Students in schools worked together in teams. "In this study, they make decisions collectively on such research issues as individuals to speak with, information to seek, methods of collections and analyzing data, and results and implications. Each team shares its findings in writing and orally at a presentation with other cohort members" (pg. 383).

Students were also required to maintain a journal throughout the process. "The reflective journaling process helps preservice teachers develop the skills to take a broad view of events in their classes, determine which are of particular importance, and attempt to understand the whys and the hows of the event of what future actions they should undertake. They continually check their assumptions, ask themselves critical questions, and refine their practice based on the answers to their questions. They learn that reflection is an active process providing an opportunity to look at past experiences and relate them to future action" (pg. 383). Having faith that student teachers were capable of doing research was central to the program, as stated, "The belief that teachers can design objective studies with rigor and clear direction is inherent in the assumption about the value of action research" (pg. 381). Unlike many traditional university professors, Keating was willing to abdicate his role as the sole expert in order to support students in also becoming experts.

Dinkelman (2000, "An Inquiry into the Development of Critical Reflection in Secondary Student Teachers") describes two vital conditions in promoting reflective teaching in his teacher education methods course; creating opportunities to learn/reflect/act and seeing it modeled by experienced teachers. He described the mentoring: he personally oversaw five school visits for clinical supervision, four return-to-campus seminars, five journal assignments, and two peer observations. In addition there was the role of cooperating teachers who worked closely with each student teacher. A critical element was central to the program. "Because schooling practices are never neutral in relation to the larger

social order, educators should strive to develop a democratic vision of the good society based on the ideals of community, equality, caring, and freedom. This vision can then be used as a referent in making the difficult curricula and instructional decisions that would help their students take part in social transformation... Critically reflective teachers see the connections between what they do in the classroom, other school practices, and the broader social and political contexts surrounding their work" (pg. 199).

In his research, Dinkelman found that the students in his sample ranked journal assignments as having the greatest influence on their learning to critically reflect. Students claimed that the journals forced them to address issues that would have otherwise been ignored. The students also valued their participation in the study as a way of growing professionally. Dinkelman interviewed them at the beginning, midway, and at the end of their teaching practice. One student identified the process as "a continued opportunity to build a trusting relationship" (pg. 220).

Moore et al. (1997, "Preservice Teachers Engaged in Reflective Classroom Research") described their approach of integrating action research in their teacher education program. A small group of student teachers and a university professor focused on a particular issue: how to implement a truly inquiry-based classroom. The group collaborated in teaching an elementary classroom once a week. They developed a classroom environment and lessons that completely used the inquiry approach. They continually reflected, collected

data, and discussed what was and was not working and why. They also further developed their own definitions of "inquiry."

A Conducive Environment

Valli (2000) states, "Action research can promote the inclusion of teacher and community voice in the generation of professional knowledge, create personally satisfying and collegial work environments, and mobilize action around a social justice agenda. Or it can be used as a bureaucratic instrument of staff development, reinforce the individualistic norms of the profession, become a burdensome mandate that further intensifies the work of teaching, or deteriorates into intellectualized theory with little laboratory action" (pp. 715-6).

Most authors agree that action research is not a panacea for all problems concerning teacher development and reflection. In itself, there is nothing special about action research. Monk (1997) argues that in an African context, "Action research is no more easy to use as a tool for teacher development and change than other tools such as supportive coaching in classes or structured release programmes" (pg. 10). Rather than asking if action research is effective, the question should be "how can action research be most effective in a particular context?" Valli (2000) discusses the importance of a conducive environment. She quotes D. Hopkins from *A Teacher's guide to Classroom Research* (1993), "There is little school development without teacher development... there is little teacher development without school development" (pg 725). She also argues that action research cannot be successful as a "stand-alone" reform strategy without being consistent with and a part of the administrations goals.

For action research to be effective, stakeholders need to share a common agenda. Dinkelman (2000) found that promoting critical reflection was more an aim of the teacher education program than it was of the cooperating teachers, who assisted more in areas of support, lesson ideas, resources, and advice on particular students. Yost et al. (2000) note the importance of mentors. "Without a substantial knowledge base and mentoring by teacher educators to move novice teachers' thinking beyond a descriptive level, higher levels of reflection will be difficult to achieve for many novice teachers" (pg. 47). Too often mentors are neglected in the dialogue in how to promote critical reflection.

To construct a conducive environment requires institutions to rethink teacher education by: creating opportunities for cognitive dissidence to challenge student teachers' thinking; having a commitment and willingness to question and develop one's own ideas, and fostering a collaborative spirit. Action research is at the core of this change. Gitlin et al. (1999. "Pre-Service Teachers' Thinking on Research: Implications for Inquiry Oriented Teacher Education") identify the benefits of action research as both functional, i.e. getting answers to problems in the classroom, and epistemological /constructivist, i.e. developing own ways of learning/reflecting. "First, preservice teachers can begin to understand what it means to do research through their participation in a research project. This insider view is more consistent with their experiential approach to knowledge production. Second, because preservice teachers rely on experience as a form of knowledge, but do not necessarily reflect on the assumptions underpinning this approach to knowledge, their implicit theories are often hidden. Action

research is uniquely positioned to expose and examine these theories because the person doing the research is studying their own educational context. Third, action research can provide knowledge that is context specific, allowing the teacher researcher to not only focus on questions they feel are critical to the success of their classroom, but also to examine the implications of the research for a particular group of students" (pg. 766).

Rethinking Teacher Education

In the past, teaching practice was seen as a "sink or swim" experience – an initiation into teaching. The goal was survival. Unfortunately, this situation is slow to change in many teacher education programs. Dinkelman (2000) discovered that critical thinking is not the priority for beginning teachers. "The technical and practical demands of first learning to teach result in the dominance of non-critical forms of reflection. In a sense, inexperience surfaces as an influential factor in supporting or impeding the development of critically reflective preservice teachers" (pg. 220). This view concurs with Lanier & Little's (1986) "Research on Teacher Education" where the literature suggests that student teaching experiences calls for management and short-term solutions rather than intellectual development. The reality is that student teachers are most often isolated within the classroom without the encouragement or positive opportunities to self-reflect.

In "An Examination of the Construct of Critical Reflection: Implications for Teacher Education Programming in the 21st Century" (2000) Yost et al. point to the need of changing how we view teacher education. "Teacher education

programs must consider shifting their emphasis from transmission of information to transformation of student thinking through dialogue." This view is similar to the perspective Tom Bourdillon shared at the first Belvedere Technical Teachers' College CDS workshop (2000) and on many other occasions. He stated that it is unreasonable to believe that any teacher education program can give beginning teachers all the skills and knowledge they will need for the next forty years. Rather it is more useful to assist the student to become a thinker who will continue to develop over the next forty years. He identified four areas to promote what he called "self-developing professionalism"; 1) skills in self-reflection, 2) skills in theorizing, 3) research skills, and 4) commitment to enquiry and self-improvement.

Yost et al. (2000) suggest teacher education programs look at law school as an example of an education program that "uses Socratic methods to open students to a new way of thinking and analyzing arguments" (pg. 46). They advocate for teacher education programs to inculcate student teachers with reflective and critical thinking skills required for the field of teaching. "Opportunities to construct a personal knowledge of learning theories and discuss issues relating to diversity and social, political, and economic forces that impinge upon schools will provide preservice teachers with a firm knowledge base from which they can critically reflect on the practice of teaching" (pg. 47).

Pulling ideas from many of the leading educationists[6], they identify characteristics of reflection to simply state, "Critical reflection involves thinking and problem solving" (pg. 40). They define problem solving as the process of making sense of a challenging situation, identifying aspects of practices that require scrutiny, creating a vision of what is good, and pursuing the actions to bring the change about.

> These higher thought processes [critical reflection] involve reflection on the assumptions underlying a decision or act and on the broader ethical, moral, political, and historical implications behind the decision or act. A reflective/analytic teacher is one who makes teaching decisions on the basis of a conscious awareness and careful consideration of the assumptions on which the decisions are based, and the technical, educational, and ethical consequences of those decisions. The end result of critical reflection for the individual is cognitive change (Yost et al. 2000. pg. 41).

Four areas of teacher education to promote critical reflection were identified; **constructive methods**[7], **dialogue/collaboration**[8], **action research**

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[6] **Dewey**: "An active, persistent, and careful consideration of any belief or supposed form of knowledge in light of the grounds supporting it and future conclusions to which it tends" (pg. 39).
Shulman: "to teach in a way that includes an account of why you do as you do, while tacit knowledge may be characteristics of many things that teachers do, our obligation as teachers educators must be to make the tacit explicit" (pg. 40).
Van Manen: three stages of reflection – first, the skills and technical knowledge of the classroom; second, questioning the underlying assumptions of classroom practices; and third, examining the moral and ethical dimensions of such practices.
Schon: Reflection-on-action, reflection-in-action, reflection-for-action.

[7] Evidence shows that even though student teachers are traditionally taught alternative philosophies in teacher education programs, they most often revert to the old view of teaching. They suggest that student teachers must first acknowledge their personal beliefs and assumptions about teaching as a step towards cognitive change. "Constructivism stresses the importance of examining prior experiences and knowledge. Fixed beliefs often work against the epistemology of reflection, which stresses the multiple viewpoints. To promote reflection, preservice teachers must have opportunities to understand how their beliefs measure against the philosophy of their teacher education programs, so that cognitive change can occur" (pg. 42).

[8] Through dialogue students identify and externalize what they stand for, how their views are different than others, and aspects of commonality. Through "critical-thinking dyads" students are

projects[9], and **writing** experiences[10]. Each part supports the others to create a holistic program. The goal is being able to make meaningful changes/improvements in schools as well as professional growth.

Discussion

Referring to the model in chapter two which includes the major theoretical perspectives of the day – free market, liberation ideology, nation building, and globalization – action research can play a vital role in the dialogue of teacher education in Zimbabwe. As described in chapter two, liberation ideology has been marginalized in the dialogue since the liberation period. While action research can find common ground with the other three perspectives, it primarily promotes an agenda of liberation ideology. Free market interests include the individual choice, entrepreneurial spirit, and ability to respond to students' needs as the teacher addresses important issues. As discussed in this chapter, action research has much global influence, and it can promote a stronger national education system. In terms of liberation ideology, action research more clearly promotes the critical consciousness for teachers to be involved in the social construction of knowledge and change in school and society. I am not suggesting that action research be the only agenda for education reform in

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supported and challenged to collaborate to deepen personal understandings, to question assumptions that often get overlooked, and to build ideas from each other.

[9] Through action research, teachers learn to link prior knowledge to situations, ask questions, and systematically look for answers. "The focus of the inquiry approach is that reflection on one's own experiences is the only way to improve one's teaching. It also highlights learning as a process that continues throughout one's career" (Yost, pg. 43).

[10] Through reflective journal writing exercises, beginning teachers can be supported and challenged to probe deeper in their own thinking of their practice, philosophy, and praxis. "Writing can be construed as a social learning tool, in which a competent mentor (the professor) moves students along the reflection continuum" (pg. 44).

Zimbabwe. However, it can play an active role in bringing liberation ideology back in to the national dialogue.

If Zimbabwe is to develop teacher education programs to reflect the ideals of a liberated country, teacher education needs to be more dialectic, collaborative, and promoting opportunities for constructivist learning and critical reflection. As discussed in the previous chapter, many Zimbabwean authors (Dzvimbo, 1990; Zvobgo, 1994; Nziramasanga, 1991) note that teacher education has not changed fundamentally since the colonial era. Education remains for the most part hierarchal and didactic. Paulo Freire's (1970) term "banking" relates to a situation in which the lecturer/teacher has all the knowledge and deposits slips of information into the empty vessels, the students. Some lecturers at BTTC tried to control the student research process by not approving topics, dictating the methods of data collection and regulating the research design. While working with students in the field, I assisted them in developing topics that they thought were worthwhile researching during teaching practice. One particular student had her topic rejected each time she returned to college. Her advisor gave little direction as to how to improve current topics. With two weeks left in TP, she had no choice but to stick with her third choice for a topic.

My research, which I discuss in more detail in following chapters, revealed that the CDS is different things to different people. In a 2001 questionnaire of 197 Vocational/Technical students at Belvedere Technical Teachers' College, the largest number of students (86 or 44%) was ambivalent about the experience

saying that it was neither positive nor negative. Thirty-two students (16%) claimed that the experience was not positive. They mostly identified not understanding the research process and not receiving assistance as the major problems. Seventy-nine students (40%) rated the experience as being a positive or an extremely positive experience. These students focused primarily on having a good feeling that they accomplished something constructive in the classroom and that they learned much in the process.

Interviewing lecturers revealed that there is much variance as to what they expect of the CDS and their own comfort level with supervising a research project. Some were eager to pave a new way of thinking about research that supports and challenges students to develop their own ways of thinking. Others were fearful of external assessors confronting them about students' use of particular strategies or terminology.

The lack of common views of the CDS is not an impediment for meaningful reform. These voices of differing perspectives and backgrounds are needed in this growing dialogue about action research in Zimbabwe. The West has its own dialogue of action research. Much discussion revolves around the critical element of action research (i.e. how the classroom reflects the political/social reality) and experiences of progressive, experienced teachers conducting classroom-based research. The issues and realities in Zimbabwe are different, and thus the dialogue should follow suit. For instance, the tension from teachers being encouraged to be innovative problem-solvers in a hierarchal, post-colonial, education system must be addressed.

In terms of promoting ideas of collaboration, commitment to change, reflection on practice, and wiliness to be involved, action research is a model for how a research method can promote a dialogue of key issues of improving education. Action research does not alleviate tensions describe in the previous chapters. Rather than building unequal power relations where a researcher discovers answers for others to accept, it attempts to bring more stakeholders to the forefront of the dialogue. Because different perspectives are encouraged, the tensions between them tend to be more balanced. Commonalities are sought for the purpose of taking action, however this is after the perspectives have been discussed and negotiated.

The CDS research project is one of the few chances for students to take initiative and control of their learning and to be creative and innovative. Because it is a college-wide assignment, the CDS is a unique opportunity for constructive dialogue for lecturers and students about the meaning of reflection, professional growth, and action research. In the following chapters I examine this opportunity for dialogue – what perspectives are the students and lecturers coming from, which issues are getting addressed, which issues are being marginalized, and how are these issues being negotiated.

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CHAPTER 4
The Setting and the Research

Posing the Questions

Assuming the premise: the CDS is an opportunity for meaningful dialogue to enhance teaching and learning at Belvedere. What conditions at the college are needed to create a conducive environment for effective teaching and learning? Do these conditions exist and promote dialogue or did the dialogue happen in spite of the conditions?

Are the ways of doing action research – that exist in practice – compatible with the ideals of constructivist and reflective teaching and learning that the CDS is trying to promote? In what ways are they incompatible?

Introduction

My research project examined the Curriculum Depth Study (CDS) at Belvedere Technical Teachers' College (BTTC). The organizational setting of the CDS includes the College and the Professional Studies section. In this brief description of the CDS's placement in the college, I will include factors that influenced its evolution. In the latter part of the chapter I give an overview of my research methodology including data collection methods and a description of the populations.

The College

With United States government funding, Belvedere Technical Teachers' College was built in 1982, a time of great expansion of education in the country. The college is situated in a low-density residential neighborhood three kilometers west of the center of Harare. BTTC is one of six colleges that prepare students to teach in secondary schools. All are situated in major cities and towns around the country and are under the auspices of the Ministry of Higher Education and Technology. The universities around the country also have teacher education

programs, however they tend to specialize in degree programs for in-service teachers. The majority of initial teacher preparation comes from the teacher colleges where students earn a diploma of education.

Under the scheme of association, the University of Zimbabwe Department of Teacher Education (DTE) ensures that teacher colleges meet the minimum standards of the University. Syllabi, schemes of work, marks (grades), enrollment records, and exams are submitted to DTE for approval. External assessors, organized by DTE, visit the college in the third term to evaluate each section's progress. Also, one member of DTE is a "link person" for communication between the University and the College.

BTTC was to specialize in preparing teachers for vocational/technical subject areas as well as academics. Originally, all students were required to study one vocational/technical area and one academic subject. However, once students entered schools, most often they were forced to choose between the two, or a particular school did not offer the vocational/technical subject the student studied. As a result, students specialize in academics – either math and science or the humanities/social sciences including: English, geography, development studies, business studies, and physical education – or they study one of the following vocational/technical subjects: agriculture, wood technology, clothing and textiles, mechanical engineering, technical graphics, computer studies, building technology, and hotel and catering.

Students' education at BTTC is divided into four areas: subject area, teaching practice, theory of education, and professional studies. In terms of

subject area, students study only the area in which they specialize, however, all students take common courses in the other three mentioned areas. Teaching practice consists of one term/trimester for vocational/technical and one year for academic areas. Theory of Education (TOE) includes: philosophy of education, educational psychology/sociology/anthropology, history of education, and curriculum studies. PS differs from TOE in being more grounded in the practical elements of learning to teach, such as: teaching methods, classroom management, lesson planning, meaning of professionalism, and reflecting on practice.

Most of the 1,500 students live on campus in one of ten hostels. A handful of the 100 faculty members also have accommodation on site. BTTC boasts of quality physical education facilities, including two soccer fields, swimming pool, gymnasium, tennis, basketball, netball, and volleyball courts. Classrooms and offices are spread out in twenty separate buildings. The library, great hall, and lecture theatre (photo below) are among the best in the nation.

Figure 4.1 – Photo of Belvedere Technical Teachers' College

The Section

Professional Studies (PS) section has had a prominent role in teacher education at the primary level since the period of expansion in the early 1980's. However, in the teacher colleges for the secondary level, professional studies has had a more tumultuous history. It was not until a conference in Mkobo in 1985 and the subsequent Teacher Education Review Committee Report in 1986, that there was a concerted effort to give professional studies equal status as the other aspects of teacher education. Many colleges had been giving lip service claiming to be integrating pedagogical issues with the content area. The new recommendation was that PS should become its own entity separate from subject areas. According to the late Professor Tom Bourdillon, some colleges were more resistant than others. They regarded PS as a primary college thing "playing little games." They continued to do what they had always done, but claimed to be attending to the pedagogical issues of PS.

The Communication Skills Project (1992) with British support came in time to reinforce the ideals of PS. Its focus was to improve the communication in classrooms with an aim of promoting questioning and thinking. During this period, the University of Zimbabwe Department of Teacher Education (DTE) articulated requirements for PS in the colleges: syllabi would have to be upgraded and approved, marks for the CDS projects would have to be in the hands of PS, and there would have to be more cooperation between subject areas and PS. Workshops, the development of modules (study guides), and the formation of committees were ways of promoting the reform.

In 1993 BTTC created a PS section headed by Mr. B.J. Mahaka, a lecturer who had background with professional studies in a primary teachers college. His task was to "transform applied education[11] into professional studies." The stated aims for the section were:

1. To equip students with the essential knowledge, skills and attitudes that will enable them to participate fully in the economic, social and cultural life of Zimbabwe through their role as effective classroom practitioners.

2. To enable students to play an active and responsible part in their own intellectual and professional development, both during their course of study in college and throughout their teaching career.

3. To develop a perceptive and thoughtful teacher, capable of reflecting on experience and relating this to theory.

4. To encourage an innovative approach to teaching, where new ideas are tried out and are seen as complementing well-established methods.

5 To produce an informed, responsible and committed teacher who is able to make a substantial contribution to the teaching profession and to the educational system in Zimbabwe (BTTC 1992.)

Mr. Mahaka felt resistance from subject areas claiming to be teaching methodology for their content. They regarded him as pushing a "primary school thing." Section lecturers from various areas (subject and theory of education) joined PS. Mr. Chandauka, Mr. Mhonde were also brought from other departments to boost the PS expertise in vocational/technical areas. The section developed modules and booklets for various study areas, including communication and study skills. As the section attempted to find ways to find alternatives to lecturing, lecturers developed materials that were more interactive.

[11] Applied education refers to specific subject methodology, i.e. ways of teaching the subject matter.

When I joined PS in 1999, Mr. J. Chandauka (right side in photo) had replaced Mr. S. Mazanhi as Lecturer-in-Charge (LIC) of PS, and Mr. Mahaka had left to work on a population project for the Ministry of Higher Education and Technology.

The section included twelve lecturers, including myself, who specialized in academic, technical/vocational, and educational media technology. Later, in 2001, Mr. I. Machera (center in photo[12]) took over as LIC.

Figure 4.2 – Photo of Professional Studies Lecturers

By the end of 1999 the LIC and I had begun to organize a series of workshops and visits to subject area sections. While the focus was on the CDS, Mr. Chandauka's larger intention was to break the barriers between PS and other sections.

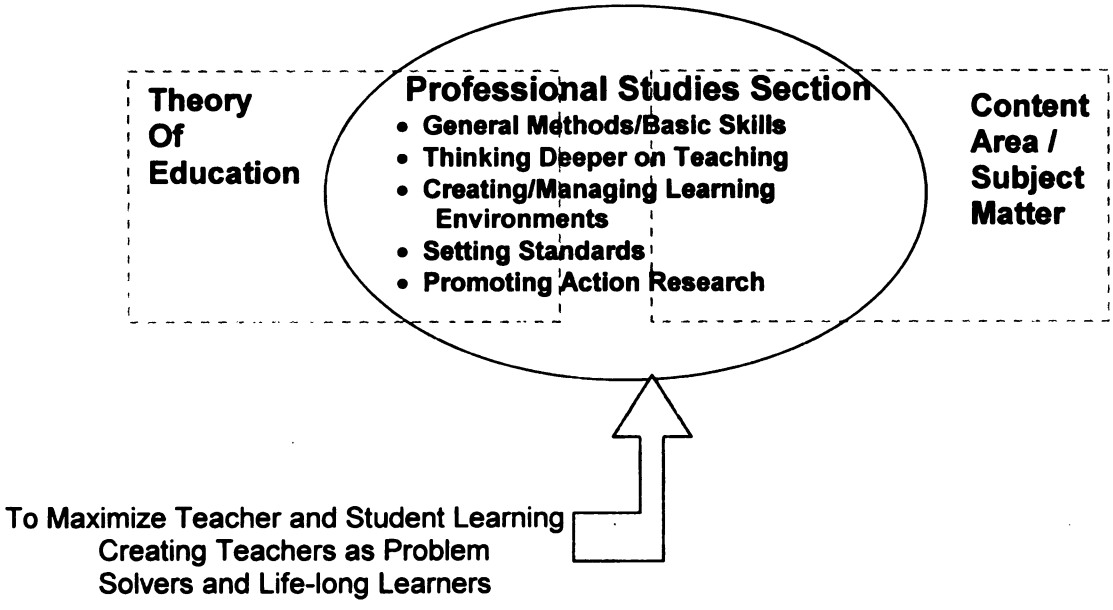
In preparing for the workshops, I facilitated a meeting where PS lecturers developed their mission statement. As a whole, they viewed PS as a link between sections and learning to teach. Below is how the section articulated (verbally and visually) their role in the college.

[12] Written permission to use the above photo of BTTC lecturers has been obtained and is available upon request.

Figure 4.3 –Professional Studies Mission Statement

Professional Studies Section
Mission Statement

To integrate educational theory, subject matter, and teaching methods to produce a reflective, innovative, and effective teacher engaged in life-long learning, personal growth, thereby maximizing teacher and student learning.



The lecturers realized that PS is not an area that could be taught in isolation. The section attempted to develop linkages with lecturers and subject areas. Since PS lecturers worked with all students in the college, they worked with subject areas in which they had familiarity. For example, Mr. Mazanhi had studied science at the university and he taught PS to science and math students, and Mr. Machera had been a lecturer in technical graphics and he worked with that group when he joined the PS section. The purpose was for the PS lecturer to make connections with the subject area and work collaboratively. Some PS lecturers were more successful than others in this endeavor.

In terms of curriculum, PS was responsible for covering four basic areas:

Classroom Communication Skills (CCS)
Educational Media and Technology (EMT)
Curriculum Management and Administration (CMA)
Curriculum Depth Study (CDS)

Three lecturers specialized in EMT. They organized their own curriculum and taught topics ranging from the importance of audio-visual aids in the classroom to handwriting on the chalkboard to all BTTC students. While the EMT lecturers collaborated with others in the section to set examination questions, organize students' marks, and deal with administrative issues for the sections, their content remained isolated from the other areas of the curriculum.

The other PS members were responsible for teaching CCS, CMA, and the CDS to students of all subject areas. Typically, each PS lecturer collaborated with one or more particular subject area(s) for the year. For example, Mr. Mazanhi taught CCS, CMA, and CDS to students studying natural science, and Mrs. Mkondo the same PS topics to hotel and catering and computer science students. The lecturers usually began teaching communication skills as well as study skills to the first year students. As the students prepared for their teaching practice, lecturers then turned their attention more towards the management (CMA) and CDS issues. Lecturers would collaborate to set the syllabus for each term for the academic and vocational/technical students.

The CDS (Curriculum Depth Study)

In November 1994, the BTTC academic board approved a policy document regarding the CDS. The aims were stated as:

1. To enable students to undertake a major detailed study of a specific aspect of the curriculum which is directly related to the classroom situation and, in doing so, enhance their awareness of the issues involved.

2. To provide the opportunity for students to focus on an area of the curriculum in which they have a particular interest.

3. To develop the knowledge and skills in research and write-up techniques necessary to present an objective yet perceptive academic investigation.

4. To enable students to contribute to the body of academic research at both college and national levels.

It was also decided that the CDS would be the only major research project required by students. In the past, subject area sections required students to do a research project in their content matter, e.g. a mathematical research project. With the CDS, students are to focus more on methodologies than on content. Ideally, students are to identify an aspect of their teaching they wish to improve, and use that as the basis for their research.

While each subject area sections supervise, tutor, and assess CDS projects for their students, the PS oversees much of the process. The section is responsible for developing standards for research and format of write-up, ensuring quality topics are chosen, making sure moderation (reports with very high and very low marks are to be reviewed by other lecturers) takes place, and organizing all final marks for CDS projects. Throughout the college, lecturers represent a wide range of understanding of research and different expectations of the CDS. Also, prior to 2000, there was no guide describing how to do the CDS or articulating a vision of it. As a result, many lecturers and students often referred to the projects as, "What is this animal called 'CDS?'"

When I arrived at BTTC in October of 1999, Josh Chandauka was trying to make a deliberate move towards using action research as a model for the CDS. The most common approach was for students to compare two teaching methods and identify one as being superior, e.g., group discussions are more effective than the lecturing method. The supervisors were not satisfied with the students' results, but they had been unable to make improvements.

I discovered that the CDS was a unique opportunity for the College to support and challenge students to reflect on their practice, question and think deeply, and develop their own ideas about teaching and learning. Lecturers from different sections were forced to collaborate and build common understandings about what it means to do research and how that is an integral part of teaching. Before this dialogue could take place, Chandauka and later Isaac Machera had to break many barriers, as I discuss in chapter six.

The Research

During my tenure at BTTC, I was able to observe how this dialogue got organized – amongst lecturers and between them and students. Many important issues related to doing action research surfaced and were addressed. While there has been some very good work produced at the college, the focus of my attention at the college and in this dissertation has been more on the process of how things change. Professor Noel McGinn once told our education systems planning class that he could develop a model for a nation's education system on the back of an envelope during the flight over. His point was not to boast but to indicate that coming up with "the answers" is the easy part – making those ideas

work is the real challenge. When discussing the CDS, another distinguished professor, Tom Bourdillon, stated:

> Deal with the problematic. And don't imagine that the solution you come across is going to be a permanent solution. It's a modus operandi that you continually try to improve. And you know, you might solve it for a couple of years and then you... suddenly a member of staff comes and a territory thing [develops]... something that happened to work for a couple of years will not work so well any more, and you'll have to renegotiate the whole thing. That's how it's going to go on.

With Bourdillon's words of wisdom, I began my research process in October of 1999. For three and a half years I listened, observed, wrote field notes, interviewed stakeholders, joined discussions, met with section lecturers, administered questionnaires, facilitated workshops, taught lessons, and attended various meetings. Through these processes I became involved with the dialogue at Belvedere relating to the CDS. The charts below indicate when the visitations, formal interviews with students, and questionnaires were conducted, who was involved, and the purpose.

Table 4.1 – Schedule of Visitations with Section Lecturers

Sections included and (Facilitator)	Date	Purpose
All Academic and Vocational/Technical sections (Mr. Chandauka, PS LIC)	January 2000	Listening to sections' concerns with the CDS prior to the CDS workshop.
Voc/Tech Sections – lecturers (Mr. Machera, PS LIC and Monde, Voc/Tech HOD)	November 2001	Share findings of questionnaire # Discussion of issues related to CDS
Academic Section – lecturers (Mr. Machera, PS LIC)	May-June 2002	Share findings of questionnaire # Discussion of issues related to CDS

Table 4.2 – Schedule of Formal Interviews and Observations with Students			
	Student(s)	**Date**	**Purpose**
1	Four PADE 9 students used as case studies	March 2000 – April 2001	Three to four formal interviews per student discussing personal/professional background, interests, goals, research experience, and experiences and insights in doing the CDS
2	Four PADE 9 students used as case studies	May – July 2000	Two to four formal observations of students teaching and engaging in research activities
3	Sample of 25 Vocational/Technical students beginning TP in Harare area schools	May 2001	Formal interviews discussion of progress of the CDS at the begin of term
4	Same sample of 20 (as #3 with five students not available) Vocational/Technical students completing TP in Harare area schools	July 2001	Formal interviews discussion of progress of the CDS at the end of term including change of topics, assistance received, lessons learned, and overall experience

Table 4.3 – Schedule of Questionnaires Given				
	Subjects taking	**Date**	**Topics covered**	**#**
1	Lecturers attending the end of year meeting	2 December 1999	Survey of CDS including: Students' work, lecturers expectations, experiences, and roles	38
2	All agriculture students (PADE 9) prior to engaging in TP	17 January 2000	Students' understanding of research: self-assessment, evaluation of research topics, comparing approaches, identifying purpose of doing research	58
3	All lecturers who participated in the first CDS workshop	16 June 2000	Evaluation of CDS Workshop: best things, concerns, next steps	21
4	The same agriculture students (PADE 9) from #2 after they completed TP	10 September 2000	Students' understanding of research: self-assessment, description of their topic, assistance received, and overall Experience	40
5	New cohort of agriculture students (PADE 10) prior to engaging in TP	13 March 2001	What is CDS? What is Research?	80
6	Sample of Vocational/Technical students beginning TP in Harare area schools	April 2001	Experiences with the CDS: self-assessment, description of topic, assistance received, and overall experience	26
7	Same sample as #7 of Vocational/Technical students beginning TP in Harare area schools	July 2001	Experiences with the CDS: self-assessment, description of topic, assistance received, and overall experience	26
8	All Vocational/Technical students who completed TP	9 September 2001	Experiences with the CDS: self-assessment, description of topic, assistance received, and overall experience	211
9	All Academic students who completed TP	2 May 2002	Experiences with the CDS: self-assessment, description of topic,	157

			assistance received, and overall experience	
	Total number of questionnaires administered and returned			657

Table 4.4 – Schedule of Other Formal Interviews		
Person	**Position**	**Date**
Mr. Tom Bourdillon	Chairperson of Department of Teacher Education, University of Zimbabwe	25 October 1999
Mr. Josh Chandauka	LIC Professional Studies section, BTTC	15 March 2000 12 April 2000
Mr. M.N. Maseleka	Professional Studies lecturer, BTTC	13 March 2000
Dr. Thompson Tsodzo	Permanent Secretary, Ministry of Education, Sports, and Culture	19 May 2002

Using elements of action research, I was upfront about wanting to collaborate in developing ways to improve the CDS at Belvedere Technical Teachers' College.

I enjoyed a unique role of being both an insider and an outsider. From my arrival at BTTC, I was accepted as a member of the Professional Studies section. I was welcomed in all meetings and enlisted to join several college committees. However, by not having a formal appointment by the Ministry of Higher Education and Technology, I had much freedom that other lecturers did not enjoy. For instance, I was able to work with students without being responsible for their assessment. Also, I was fortunate enough not to have to carry the bulk of administrative work that kept my colleagues very busy. By nature of being the only member of staff from the United States and one of six non-Africans, I received special status. Most often this status meant little in being able to get things done. For instance, I was greeted by the principal when our paths met walking on the campus, but I still had to beg, plead, and borrow to get a piece of chalk.

Trying to be open with my biases, I began the research process telling my colleagues and students that I was looking for examples of the CDS working. While the saying focuses on learning from our mistakes, I believe our successes have more to offer for our learning. Knowing why something worked is more important than knowing why it did not. The failures were there, and in many cases they were obvious. The triumphs took more effort to uncover, but they did exist. By focusing on the strengths, I was trying to collaborate in building positive models of how to support and challenge students to do meaningful research.

In the next chapter, I will share insights I have gained by being a member of the Professional Studies section at BTTC and collecting the above data.

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CHAPTER 5
Four Students and Three Issues

Posing the Questions

Assuming the premise: Students will take advantage of the opportunity to engage in dialogue about their work. To what extent do individual students engage in dialogue and critical thinking regarding their action research on teaching and learning in their classrooms?

What issues concerning the context and conditions of students' teaching and learning get addressed in this dialogue? What role do these issues play in the larger dialogue of education reform? That is, how does the micro-level dialogue of students engaging in the CDS at BTTC reflect or impact on the macro-level dialogue at the national level?

Introduction

In the first part of this chapter I introduce four students who reflected a range of experiences. In terms of understanding the research process, the students demonstrated: "did not get it," "did not do it," "got it " to "had it". In the second part of the chapter I describe three major issues regarding the CDS that evolved from their and other students' experiences. The issues revolved around 1) the process of picking a topic, 2) how students conceptualized the research, and 3) the preparation and support the students received. I examine how these issues were a part of the dialogue and negotiation of the CDS, i.e. how they got organized and were debated. While tensions did exist and perspectives were negotiated, often common ground could be found. Sometimes the agreement was more in terms of reaching a common understanding than taking action. In the following chapter, I explain the implications of how the dialogue of the CDS for the College and for teacher education is general.

All four students came from the same cohort, Post Agriculture Diploma in Education (PADE) group of 2000. The PADE program was different from others

at the college due to the students having learned the subject area prior to coming to Belvedere. All PADE students graduated from an agricultural college after completing secondary school, and nearly all had some teaching experience. As a result, most PADE students were older and more mature than others at BTTC. Also, the program was completed in one year and a term, whereas vocational/technical subject programs spanned over four years, and three years for academic areas. The longer curriculum allowed for in depth study in the particular subject area. These groups spent much of their time at the college studying their content area as well as teacher education. Teaching practice (TP) took place over the second trimester for PADE and Vocational/Technical (voc/tech) programs and the whole second year for academic subjects.

The four students I have chosen as case studies reflect the range of experiences I observed in my three and half years research at Belvedere. I was originally looking for students who "got it" so I could observe what it means for students to engage in research (for a first time) in a meaningful way. Each student was highly recommended by an agriculture lecturer as someone who was bright and likely to do a decent research project. Two of the students, Auther and Patience, approached me about being in the study. And the other two, Grace and Tobias, were willing to assist when asked. (I used pseudonyms for all the students except for Auther who requested otherwise.) I wanted a mix of types of locations and schools where they were to do their teaching practice (TP). Two were in urban schools in Harare – Auther in a high-density and Tobias in a low-density suburb. The other two were in rural schools in Mashonaland

North – 100 to 150 kilometers from the capital. Patience's school was a religious boarding school and Grace's was a government day school. One rural and one urban school had very good facilities, for example computer labs and swimming pools – Patience's and Tobias's schools. The others taught at government schools that had minimal resources and larger class sizes. I interviewed these four students prior to, during, and after their TP experiences. Also, I observed them teaching in their classrooms and working with pupils in their gardens (i.e. practicals) a minimum of three times throughout the thirteen-week term. Because transportation to the rural schools was difficult, I made fewer trips but spent longer periods of time with Patience and Grace. I would arrive late in the morning and stay for the remainder of the teaching day (typically four hours) observing lessons and discussing issues. For Auther and Tobias, I typically arrived half an hour prior to their lessons and remained half hour to an hour afterwards for discussion purposes.

I have found that the type of school or the location had minimal effect in terms of the students' experience in doing their CDS research project. For example, students were supposed to be observed/supervised by college lecturers at least two times per term. During the fuel crisis of 2001, more students in Harare went without observations than did those in rural areas because van trips with several lecturers were organized to travel to the various schools outside the city region. Lecturers were supposed to organize their own transportation to schools in and around Harare, and as a result, many were unable to find a way. While the school-based mentors varied from each school,

all were generally supportive without being involved in the day-to-day activities. Each student teacher took the role of sole classroom teacher from the beginning of the term without engaging in any team-teaching with their mentor. No mentor took an active role (positive or negative) in the students' CDS research project. This was typical for all BTTC students engaging in teaching practice.

What follows is a description of the experiences of Tobias, Patience, Auther, and Grace doing their CDS research project during their teaching practice. Tobias represented students who attempted to conduct the research, but missed the point of doing it. I categorized this as "did not get it." Patience did turn in a report and claimed to do the research, but in reality, she did not do the project. This, I categorized this as "did not do it." Auther represented the successful student who learned throughout the project and produced something worthwhile. I classified this as "Got it." While Grace was successful and very bright student, she began the process already having the skill and knowledge to do research well. I refer to her experience as "Had it." The table below identifies each student with his/her category and characteristics of the school where each did their teaching practice.

Table 5.1 – Case Study Students and Their Schools

Student	**Category**	**Location of School**	**Type of School**
Tobias	"Did not get it"	Urban/Low Density	Private
Patience	"Did not do it"	Rural	Missionary
Auther	"Got it"	Urban/High Density	Government
Grace	"Had it"	Rural	Government

Tobias: the Experience of "Did Not Get It"

Tobias did his practice teaching at a secondary school on the outskirts of the capitol city. The school was built with foreign donor assistance after the liberation struggle to assist war veterans, but since then it has focused on helping school-aged kids with physical disabilities. Like most other student teachers in the PADE program, Tobias was a graduate of a Zimbabwean agricultural college and had taught (without teaching credentials) for five years. He was born in 1966 in a rural area of Chipinge, but did not start a local government primary school until liberation in 1980. Later, he moved and attended another government school in Hippo Valley. It was not until he attended a secondary school in Chiredzi, in the southern part of the country, that he was able to study where there was electricity. Because he did not have funds to study for Advanced (A') level exams, he moved in with an aunt in Chitungwiza to study at a local agricultural college. After graduating, Tobias started teaching in high-density schools in and around Harare.

Prior to starting his teaching practice (TP), he mentioned that he would have liked to use the opportunity to try some new things he had learned at BTTC, such as simulations and feedback strategies. However, instead of focusing on methods, his view of good teaching was primarily directed to his relationship with the pupils.

> I think good teaching comes from how you handle your pupils. You should not be a teacher who is very rough; you have to take into consideration a lot of things about different pupils because they will be from different backgrounds[13].

[13] All quotes from Tobias come from typed transcriptions of interviews on 4 April 2000 and 21

When asked about methods of instruction of good teaching, he mentioned that it was not good to only lecture – it was better to use a variety of approaches including using work cards, group work, charts, and models. When asked to describe the teaching of the best teacher he ever had, he discussed how the teacher gave short and precise notes that summarized the necessary information.

His views of good research were based upon concepts of action research.

> I think good research is that type of research that is actually obtained from an individual; say seeing a problem for himself, not just having a topic given to him. He has to actually find the topic for himself, identify a problem, and then to solve the problem, and see how he can actually tackle it, and how you can come up with the solution to that problem.

In terms of bad research, Tobias discusses the researcher not being critical.

> I think bad research is whereby a person just thinks of an interesting topic and just tackles it without looking at it in depth or whether it will be very useful or nothing. He just takes and does it.

Tobias's stuck with the same CDS topic throughout the term. He wanted to compare the effectiveness of teaching agricultural concepts with three-dimensional models versus two-dimensional charts. Originally, he was planning to use these aids to cover the topic of a two-stroke engine. His approach was straightforward with dividing the class into two groups, teaching one group with models and the other with charts, and then testing the pupils afterwards.

June 2000 or from typed field notes of observations of lessons conducted on 21 June 2000, 30 June 2000, and 6 July 2000.

He had used charts before but had never tried using models in his teaching. He thought that models would be helpful in pupils understanding the very complex topic of a two-stroke engine. An agricultural lecturer and later Ms. Matchaba, a professional studies lecturer, had introduced him to models. In fact, he was so excited about using models that he was convinced of their effectiveness. Tobias stated that after Ms. Matchaba's demonstration was "when I came to realize that these models are better."

In the first and second interviews, I suggested that he already knew the answer to his question of which is more effective between models and charts. I encouraged him to stick with the models but try to find ways of using them more effectively, for example having students construct their own models. Tobias listened politely to my advice, but he did not stray from his original plan.

Once engaged in student teaching, Tobias continued his faith in models stating that, "There are some certain complex ideas which then can be easily acquired when you use these models." He had used a chart to show crop rotation and felt that it was not effective for pupil understanding. Tobias began to develop a theory about models:

> Firstly, a model would actually motivate those pupils and from that central point of motivation, the pupils will actually grasp data because they will be doing it with their own selves, unlike diagrams where they just see and will not do anything.

He also faced a real problem in his teaching practice. Here is how he described it:

> Tobias: If you actually say that you have some work cards and then you give [them to] these groups, if you do not have any source where they can look for answers, they do not participate. So every time you give

them group work they need a textbook where they can source out the answers they'll give you.

Interviewer: So they are good at finding answers, but in terms of creating...

Tobias: In terms of creating their own answers, they cannot. They cannot stand on their own, they need a base and, if they are given that base, they just relax because they have that base and, in the end, they fail. Because all the information they can get from the textbook.

Nine days later when I observed Tobias's form I (first year of secondary school) class. Twenty-five students (with similar number of boys as girls) sat in three rows of benches facing the front. Most of the students, but not all, wore gray uniforms; the boys wore pants or shorts and matching short-sleeve button shirt, the girls wore a skirt with a white blouse. Some wore matching sweaters or sport jacket. Other than a chalkboard, rows of benches with tables, and some agricultural posters on the wall, the room was sparse – no audio-visual equipment, bulletin boards, or displays.

The problem of pupils not thinking on their own was apparent. The topic was on growing cabbages. Pupils were looking in textbooks for answers to questions without thinking about the questions or the answers. While I concurred with Tobias about the problem, it seemed that his teaching strategy discouraged the understanding he desired. The tasks were set up for pupils to copy from the text, and recall the answers. Discussions were mostly for specific answers and not deeper thinking or comprehension. There were no questions beyond deeper than recall on Bloom's taxonomy.

When Tobias asked the class, "what is the reason for leveling?" One pupil responded by discussing "lumps." Instead of encouraging a discussion of the

effects of lump in terms of leveling, Tobias asked for the correct terminology. During group work, he told one pupil, "You don't have to explain, just write it down." When the group presented their answers, Tobias told them to "read what you have on the paper" and there was no time for further discussion. Another time, the class indicated that they did not know what acidity was in terms of Ph. Rather than using the opportunity to explain, he continued to the next issue. At one point, he did ask if the pupils had seen a cabbage seed. They were not sure, and again he did not discuss the point. The second period of the class was for the practical part of the lesson, and the topic was "bedding." In the first ten minutes, Tobias gave the pupils the definition and asked questions relating to the sources and benefits, while ignoring a pupil's question if bedding is necessary. Afterwards, he assigned tasks for groups of pupils. There was no apparent connection between the theory (classroom) part of the class and the practical (field) work.

Perhaps a model (or diagram) of a cabbage or a plot could have been used to promote understanding in the lesson. Earlier, Tobias had thought that using models would be a way to address the problem. Unfortunately, he waited for the last topic of the term's curriculum to introduce the use of models. I observed that lesson also.

The topic was the "Yoke." The class was divided into two groups – one remained in the class and the other did practical work in the garden. Both groups started their lessons the same way with group work to answer questions on "job cards" that related to the parts and functions of yokes. In the first class, Tobias

used the "chart" – which was a diagram of a yoke – as a revision tool. The diagram was the same as the one in the textbook. In the other class, Tobias showed a "model" – which was missing clamps, stokes, chains, and notches – instead of the chart.

After Tobias showed the chart/model, he asked 58.3% more questions to the model group than to the chart group. Nearly all the questions were recall /factual from notes pupils wrote, e.g. the lengths of rope depending on activity, identifying parts of the yoke, and its functions. In both cases, pupils answered questions with short precise statements. The chart group gave two answers that were incorrect compared to the model group that gave one incorrect answer, but the latter group also gave two responses that Tobias accepted as alternatives to the correct answer. None of the pupils elaborated on answers, and they did not ask questions when Tobias gave them the opportunity.

While discussing the outcome of the lesson with Tobias, he claimed that the chart group had less motivation. He could tell by how they responded. The example he gave was the definition of a yoke.

> The students [in the chart group] were struggling and they weren't able to define it so I reworded the questions as to describe the yoke, and students still had troubles. The model group was able to say something on the first question.

The depiction may have been accurate however; he had not introduced the chart or the model at that point in the lesson. He continued to state that the model group was more confident, and that the other group's confidence was not very high. Also, he pointed out that the model group was able to a) conceptualize the ideas and b) answer the questions better than the other group.

I was unable to identify any differences between the groups during my observations.

To address the conflict between what happened in the classroom and what Tobias wanted to happen, he created his own reality. In his completed CDS report (submitted to the Agriculture section, October 2000), he continued to describe a difference that did not exist. He created the chart below.

Figure 5.1 – Chart in Tobias's CDS Report

Table 6 – A Motivation Assessment Card				
Area of concern	Method	Ratings (Number of pupils)		
		Very Low	Average	Very High
Pupils involvement and questioning	Chart	5	3	4
	Model	1	3	8
Punctuality	Chart	4	2	6
	Model	0	2	10

In neither the lesson nor the follow-up discussion, there was no indication that he was keeping such records. He also wrote that there were two sets of tests where the model group scored 13.4% and 13.8% higher than the chart group. However, he produced no evidence that such a test was ever given. When we discussed his project, he had not recorded any of the figures used in the report.

In the end, Tobias's PADE supervisor gave his CDS project a 67% – which was close to average for his group. His report was straightforward and clear. While he did not give a description of what happens when using a model instead of a chart in a lesson, he followed the prescribed format of the report.

I labeled Tobias's research efforts as "did not get it" because his understandings of the use of models never went deeper from his first impression prior to teaching practice. He went through the motions, followed the steps, and produced a report, but he did it all without thinking, reflecting on his practice, or trying something different in his teaching. He was not challenged by his mentor at the school, and his CDS tutor accepted the work without question. My questioning had little impact.

Even though he described good research as though the researcher has ownership of the process, he conducted research as though it is a black box – where one mysteriously creates answers. Because he did not have an idea where the evidence comes from, he created a reality that gave easy answers. By delaying the use of models until the last topic taught, the research remained something separate from his teaching. He was unable to use what he learned to improve his teaching. He had such faith in models, that he did not learn how to make their use more effective.

Patience: the Experience of "Did Not Do It"

Like the others, Patience felt she received a sound education. All her primary and secondary schooling were in group "A" schools – these were the government schools reserved for the whites prior to liberation. These elite schools remained intact with the requirement that they open their doors to black Africans. While the schools followed the same curriculum, the resources are far superior. In her primary school, Patience learned how to play the piano, swim, and play tennis.

It was from her experiences in these group "A" schools that she formulated her view of what is good teaching.

> Good teaching is whereby teachers leave pupils to discover for themselves. At least that way the pupils get attached to what they are doing. You have to have the pupils understand the concepts and getting the job done[14].

As an illustration, she remembered using a computerized piano that she punched a combination of keys to create words.

While she wanted to teach in such a way that would promote discovery learning, she realized obstacles to the approach when she began teaching for nine months after completing a diploma in an agricultural college.

> You can want to be a teacher who wants pupils to discover for themselves. The problem comes when you are in a situation when you are forced to dish-out the information to the pupils...Just like Agriculture syllabuses, so the contents matters to the pupils because they have to learn this in short space of time. They will be forced to take notes rather than making them learn their own way, which they want. It's because you will be rushing to finish the syllabus, because they have to write Form Four [Ordinary Level Exams] after finishing the syllabus.

In terms of her view of what is good research, Patience responded that it was something that was done "wholeheartedly."

> You want to do research – you are trying to fill a part in yourself, that you have a need to do that. You want to do this research, and you have to fulfill this good research.

Her view of bad research was when it becomes some requirement and the researcher is not honest about the work.

> Some researchers do the research for the sake of doing it. In the end you don't put yourself into it. You just do the research to just come up to the

[14] All quotes from Patience come from typed transcriptions of interviews on 17 March 2000, 6 April 2000, 15 June 2000, and 30 November 2000 or from typed field notes of observations of lessons conducted on 15 June 2000 and 11 July 2000.

> due date. In the end people tend to duplicate or they write what they didn't research about. So when reading the research you can just tell that this person was just lying. This person didn't get the information because mainly you would be having your followers and whoever wants to read that research, they are putting all their trust you have done the research, and they find out that you have done this just to beat the deadline, which is bad.

Ironically, Patience did not have much interest in her original research topic – comparing field trips with simulations. She was planning to have her students participate in a simulation and then test them. Afterwards, she would take them on a field trip and again test to see how well they were able to conceptualize concepts.

Later Patience confessed, "I only picked this topic but that's not what I wanted." She picked it because it seemed like it would be easy to get done.

> It sounds easiest of all the topics because if you tried to open up your mind, you find there is no time to do what you want. What you really want! So you have to do CDS to get a mark at the end.

Through some discussion, Patience revealed what she was more interested in doing. She wanted to spur student interest in the subject by having them develop a "dream plan" for a farm they would like to operate in the future. She preferred the new topic because, "I get to do what I want to do...I am trying to sell my subject to my pupils." And she asserted that the research was now more meaningful.

Her college CDS tutor thought the topic was a bit vague, but he approved it. And Patience was planning to start as soon as the term began.

Her placement was at a mission school in the northern rural area. Like most mission schools in the country, the religious order managed admissions,

finances, and the grounds, while the teachers, paid by the national government, followed the standardized curriculum. The boarding school may not have had all the facilities of an elite group "A" school, but it could boast having: orchards, cattle, ostriches, chicken, fields of crops, computer lab, swimming pool (although not used), tennis courts, and many buildings.

In the lesson I observed, there were relatively few pupils (approximately fourteen) due to agriculture being an elective class. All of the form III pupils (third year in secondary school adolescence ranging from 14 to 16 years old) wore the burgundy school uniform. Like Tobias's class, there was an equal mix of boys and girls, and the room was sparse. The desks were a bit smaller and easier to move, but there were no additional resources in the room.

The pupils in Patience's class were quick and well versed with most of the agricultural concepts and terms. She began a lesson with writing, "Investigating the % pore space (air) in the soil" and asked why it is important. Immediately pupils raised hands and gave answers relating to, "water penetrating the soil," "percentage aeration of different types of soil," and "water holding capacity of the soil." Later in the lesson, pupils in groups experimented combining soil with water to measure the increase in space. She explained the formula for determining the percentage of pore space in soil. Afterwards, pupils wrote in their diaries/journals what they had discovered. For the practical part of the lesson, pupils worked in the garden preparing their beds for planting beans. While they were less enthusiastic with the manual work, they did manage to complete the task. They needed little guidance; for preparing garden beds was

something they have had much experience over the years. Patience stated that this group was the least interested in the study of agriculture, but I was impressed with how well versed her pupils were in agricultural concepts and how quickly they prepared the garden.

Perhaps, these pupils were on their good behavior. Patience complained that this group had been giving her problems including issues of disrespect. They had locked her out of the classroom twice. As a result, she became more strict, and she believed there was an improvement. However, it was clear to see some tension existed. While trying to keep command of the group, she had personal chats with some groups about which pupils were the most popular at the school.

I made a return journey to the school later in the term to see the pupils present their "dream plan." Unfortunately, Patience was feeling ill and had cancelled classes. While no pupil had turned in their plan at that point, she stated that they were prepared to do their presentations. She was planning on evaluating their efforts, number of people consulted, and the relationship of the plan to their own garden. She pointed out that some students were using their garden plots (at the school) as a microcosm of their plan, for example hiring other students to do some of the tasks. She was also planning to give them one more questionnaire to see if they indicated a change in attitude towards agriculture.

We made arrangements for her to contact me to discuss her impressions of the presentations. However, I did not hear from her and we did not meet again until after she submitted her CDS report.

Gaps in her report led me to the conclusion that the "Dream Plans" remained a dream and not a reality. There were no descriptions of what the students did in their dream plans. However, she included graphs for such things as progress (how well pupils were following their plans) and how well students did. All the data was simply presented in a quantitative form, and as a result there was no description of what the numbers actually represented. No dream plans were included in the body or appendix of the paper.

She asserted that the project was successful, yet there was no evidence of what role the dream plans played in any of the courses she taught. She wrote:

> Initially students had a negative attitude towards Agriculture practicals as they associated them with cheap labour – work done with out any payment. Later as the term progressed and the projects were underway, they realized they could enjoy the subjects as they were given the floor to make decisions on what they wanted to do with a justification.

Her tutor questioned if she actually carried out the dream plans. On the evaluation form, he wrote that the literature review was vague and did not mention anything about "dream plans." He also wrote, "Implementation of the chosen projects in such short period of time is very doubtful." She received a fifty percent, which is just passing. She did enough work that a supervisor would not want her to fail the whole program (the CDS is required for graduation), but by giving her a borderline-pass sent the message that she just got by.

Further indication that Patience did not complete the research project was when I asked how useful the research project was in her teaching. She had agreed that it was useful, but stated that it was not necessary to write anything

down. At the final interview she did indicate that participating in my research study kept her somewhat accountable.

> If I hadn't participated in your research, I think I wouldn't have done my series the way I did it. I would have just maybe taken up somebody else's series, and you know copied it and just reproduced it like that.

A month after she completed her program, she reflected on doing the CDS research project and found that the process was not very useful.

> The CDS...I would like to think that in our cases PADE, I think it is a waste of time...Because we have been teaching when we came to Belvedere and we know all the problems and what is happening and really someone tells me to go out there and try to look for a problem of which you really know the problems and you know how to solve them. Anyway, problems come day in and day out and you have to solve them as you are go on.

She also did not see any change in the way she taught.

> I do not see my teaching changing, because while we go there, back into the system, the system is just the way we left it. And with the new methods that we were taught at Belvedere, they don't fit into the system.

While, Patience did not show bitterness towards her program at Belvedere during this interview, she just felt that she did not experience much growth because of factors regarding the way the education system was organized and from having taught and having had agricultural experience prior to coming to Belvedere.

While the problems of the education system were realities young teachers had to face, Patience appears to have missed an opportunity for professional growth. She was articulate and quick enough to identify how doing research is incorporated in good teaching, e.g. "By investigating an issue wholeheartedly a teacher is able to improve the learning situation. The teacher discovers with the pupils the new ideas that make learning exciting." However, in the end she

simply did what she had earlier described as "bad research" – just doing the research to complete the task, not caring about it, and making up information.

Auther: the Experience of "Got It"

Auther did his student teaching at St. Peters' Kubatana, a secondary school not far from the primary school he attended seventeen years earlier. Located in Glen Norah C, a high-density suburb south of the capital city, both schools were built to accommodate a large number of pupils. Even though he had relatives in the suburb, he lived like many others in a rooming house where he rented a single room in which he slept, cooked, and planned his lessons.

Before he turned twenty-four years old, Auther completed his secondary education, attended an agricultural college, and taught for three years – all in rural government schools. St. Peter's was once a reputable school, but those days were over before Auther started his TP. While officially a missionary school, the administration and teachers were all government employees and a community-based "school development committee" oversaw the running of the school. The enrollment was far below the two thousand-pupil capacity.

Auther believed that dialogue was an integral part of good teaching.

> I think this is whereby a teacher would give the children time to interact among themselves allowing a conversation time between teacher and the pupils and also among the pupils themselves, giving the freedom to express there own views, their own perceptions and all in all they should get freedom from what the teacher would present. They should be exposed to what freedom actually is[15].

[15] All quotes from Auther come from typed transcriptions of interviews on 17 March 2000, 10 April 2000, 7 July 2000, and 9 April 2001 or from typed field notes of observations of lessons conducted on 22 May 2000 and 28 June 2000.

When asked to give an example of good teaching, he described a mathematics teacher who told jokes before and after lessons. Sometimes the teacher told stories, some of which had related to the subject matter. However, Auther could not think of any examples of teachers who engaged in the type of education that he described as being "good."

Auther was less clear with regard to his view of what is good research.

> I think good research is mainly one that has got proper tools that are used and that comes up with something that can be tried... that can be put into practice.

Originally, Auther chose "Code switching in the learning and teaching of agriculture" as his first CDS research topic. He knew that language issues were a problem in the classroom, and by his using terms in ChiShona, the native language of the area, pupils might learn concepts better. He had done some "code switching" in his teaching before and saw pupils increase their understanding, including some "ah ha" experiences. Also, he viewed research in terms of functional purposes. When asked how he saw research influencing his practice, he said "this would help me in identifying the problems that the pupils are facing and I should immediately solve these problems."

Even though he had articulated a plan to conduct this research, he stated that this topic was not what he was most interested in doing. By the second interview (still prior to TP), Auther decided to change topics. During a visit to the school, he realized that the pupils were not completing the practical aspect of the subject. Very little was being produced in the school's garden. Auther thought that the problems started with the school disempowering the department and

pupils. The agricultural department received occasional funds to purchase seeds and other inputs, but once the crop matured, it was sold by the school. The teacher and pupils saw little results of their hard work.

Auther changed his topic to investigate the reasons for absenteeism during practicals (the time when pupils were to do the physical work in the garden.) Later, he decided to look at types of rewards. In the end, he developed his topic to examine the role of responsibility and ownership in pupils doing practical work. He wanted pupils to feel ownership of a single plot whereby they would choose what to grow, care for the plants, harvest the crop, and then decide what to do with the profits.

The reality of the pupils' ownership was more limiting than what Auther had envisioned. While Auther had over forty students enrolled in his Form III class (third year of secondary school), just over thirty attended lessons. Many were "chased away" from the school because they were unable to pay school fees. The students did not have a choice of what to plant (the school had covo and rape seedlings) or where to plant it (the class was allocated a particular section of the school's plot.) Pupil decision-making was even more restricted when I visited Auther's class during practical work. While the students chose their partners, Auther dictated the size of the plot, the spacing of the seedlings, and the process of preparing and planting. Over the term, the pupils were responsible for watering and tending their plots, often using time outside agriculture lessons. In terms of pupil accountability, Auther was able to tell which pairs were caring for their plots and which ones were not. At times a particular

plot went untouched and dried-up. At the same time, other plots flourished and a place card naming the pupils and crops was displayed.

Throughout the term, Auther introduced topics that would assist the pupils' plots, e.g. use of fertilizers and pesticides. In one lesson he asked the pupils if they had discovered any pests in the garden. One pupil claimed to have seen snails and another saw aphids. Rapidly asking questions, Auther gave a mini-lesson on precautions to take when using chemicals; then he demonstrated spraying the garden.

Once the covo started to grow, Auther noticed that some of the leaves were taken. The pupils had called his attention to it. It appeared that other pupils were stealing from the garden. Auther had the pairs harvest their crop, and he recorded the number of leaves collected. Some came up with more than seventy leaves while others had twenty or less. The pupils were visibly excited about having their own produce. When Auther asked what they were going to do with it, nearly all said they would take it to their parents and a few mentioned selling it. When I asked why he thought some plots did better than others, he identified that some pupils stopped coming to school due to being unable to pay school fees. He also discussed some groups were not watering or did not water immediately after using the fertilizers. He did notice that the pupils "running away" from doing practicals had been greatly reduced from the beginning of the term when he found seven pupils not present.

Auther maintained a high level of excitement for this research project throughout the term. He was eager to have someone come to discuss and

observe what was happening with his project. He asserted that he benefited from our interviews together. "It helped me a lot.... A lot of the questions that you were asking in the interviews were some of the questions sort of relating to what we're doing in our CDS." I had not suspected Auther as one who would plagiarize, but he stated that it would have been a possibility if he did not participate in my study.

> If I wasn't a part of the study, I could have done it differently. I could have copied from someone else. I could not have succeeded in my CDS.

When I asked if there was much copying going on, he stated, "There is a lot of copying. There is a lot of duplication of documents and a lot of making up information and something like that... People are not doing their original things."

Auther was less positive about the supervision from the college. Instead of support, he felt conflicts between what different lecturers told him.

> One who will come to supervise you whilst you are on TP is different and will tell you different things, ".... this is wrong...what you were taught is not the right thing, it's not what we agreed upon...." You see if there can be some agreements with people holding several seminars [among] themselves, the lecturers agreeing on what they do will help a lot.

I found extensive evidence of Auther's openness to learning from working with him. In an interview nearly a year after he completed TP, he clearly felt pride in completing his CDS research project.

> I learned that if you try something and you do think that it does not work, you don't have to think that it doesn't work until you work it out. You try it. You experiment it. You have got to work on it very very highly so that you can achieve it. So by doing that CDS project, I did it that so many things can happen in achieving what pupils would be looking for – the hidden things that people do not know – would come up only if one person works hard. So in doing the CDS it helped me a lot: taking myself as someone who has worked so hard in achieving something.

Auther believed that it was the teachers' responsibility for ensuring learning in the classroom. He saw research as being integrated with the type of teaching he hoped to continue to do.

> It's all about experimenting with pupils. Not that what you read from books is what you should always follow or the laid out methods of teaching are the only ways of teaching, making pupils understand, so you have to try new things.

He became conscious of changes in his view of teaching and learning towards a more dialectical and constructivist approach.

> I now know that I can experiment with pupils on what they want. I had been listening to the pupils' problems, rather than manipulating them, something like that, and I can now talk to pupils and pupils can now talk to me freely, unlike what used to be when I thought a teacher was a teacher who is above the pupils... So, I think I have changed greatly.

Auther reflected that being open led to his learning how to construct new ideas from his experience in the classroom.

> You know, you get some experience; you get some new ideas in attacking new things or solving problems. We solve problems in different ways. You are open. Your mind is open as long as your head (the mind) is open and knows how to solve problems especially when dealing with people, school kids.

When I first asked him if he had developed his own theory about teaching and learning, he was hesitant. However, by the end of the interview he stated, "Like now I know what a theory is like, you can develop your own, you can come up with your own ideas, you organize them, something like that." The theory that he was developing related to the idea that students learn best through discovery and experimentation, but for that learning to happen, the teacher has to do many things including being open to listening to students, building trust, and willing to address the real problems of the classroom.

Having conversations with Auther where he shared his willingness to develop new ideas and observing him listening to students, I realized that he had "gotten it" in terms of understanding the purpose of doing action research during student teaching. Through the research process, he became more reflective about his practice and role as a teacher.

While we had intensive discussions prior to his writing the CDS report, I did not see what he had written until after he submitted the report to his tutor. I was surprised to see that the qualitative aspect to the report was absent. He spent much time listening to students and observing them, but he did not include their voice in the report. Instead, Auther used quantitative values to describe the pupils' feelings.

> The researcher had to randomly select pupils for interviews from the group. A total of twenty-one pupils were sampled to answer the questions. It came out clearly that 100% of the pupils selected were in discontentment with the way practicals were being carried out at the school. Seventy-five percent of the pupils indicated that their parents encouraged them to do practicals subjects. The remaining percentage (twenty five) probably indicated their discontentment in the manner the lessons were being carried out.

Nowhere did he describe what the discontentment looked like, how pupils expressed it, or what it meant for pupils doing agriculture. Also left out were descriptions of what pupils did in their groups, what responsibilities they had, what their "ownership" entailed.

In our final interview, I asked Auther why he excluded the qualitative aspect of the project in his write up. He recognized the contradiction, and claimed that he wanted to include things like pupils' feelings, understandings, and attitudes, but did not know how to present them in written form.

> I think the major problem was on trying to come up with the numbers and so forth on qualitative. You talk of pupils' feelings being good, something like that, but I wouldn't rate how much they have feeling, like five over five something like that? .... What if, in future for example, what would you do to some feelings that you get from pupils? How would you present them in your write-up?

Auther's tutor from BTTC was not as critical. The only criticism on the evaluation was related to a mixing of verb tenses. The CDS report earned a score of seventy-five percent. Even though it did not give him a distinction, it was one of the highest in his class.

Auther embodied many of the characteristics necessary for a successful teaching practice experience. First and foremost, he was willing to address the hard work straight on, never shying from doing what had to be done. He also was willing to take risks – often he tried things not knowing the outcome. Thirdly, he viewed research as a process – his topic continued to evolve as he thought deeper about the research and saw some of the effects. And lastly, he searched for people, myself included, to dialogue with about research, teaching, and learning.

Grace: the Experience of "Had It"

Grace attended rural government schools, similar to the one where she conducted her teaching practice in Chiweshe, about 125 kilometers north of the capital city. However, one difference was that the primary school she attended was a council school – where the government hands over some of the responsibility (of construction and operation) to the parents. She was one of the top students of her class and could have studied any subject, but she decided to follow her fathers' footsteps – an extension worker – and pursue a career in

agriculture. Briefly she worked as a farm manager. Because the hours were grueling and pay low, she decided to go into teaching. After three years, she decided to get her diploma in education so she would be a qualified teacher.

Grace viewed agriculture as a practical subject. As a teacher she wanted pupils to work effectively in groups to complete tasks. Demonstrations and questioning were also methods that she planned to incorporate in her teaching. She acknowledged that she taught the same way she had been taught, but rather than sticking with one method, she experimented in her teaching.

> When I got into the field of teaching, I copied what the lecturers and the teachers in secondary schools were doing; then I tried it and I would learn from that. If I used the group method, then I would say there was lack of exchange of ideas in the classroom, then I would say I tried this and I failed. What other method? I would try it[16].

When asked to describe "good teaching", she did not discuss any particular teaching strategy. She focused on what she wanted the pupils to do.

> So good teaching is that teaching which brings up a pupil who is able to think and to apply concepts learnt in teaching into other programs or into the outer world.

In terms of viewing good research, she looked at issues of having a clear, methodical plan to produce results.

> If you are doing research, you want to find out something, you should have a strategy, a method on how you are going to conduct your research. So a good research should have a good methodology to be followed during the research process and not just jump from one point to the other. Also you have to produce results.

Grace approached her research with a clear topic, and that topic did not change throughout the process. She decided to look at the issue of "corrections"

[16] All quotes from Grace come from typed transcriptions of interviews on 3 April 2000 and 14 June 2000 or from typed field notes of observations of lessons conducted on 14 June 2000.

that pupils were supposed to make after they take a test. She based her topic on a problem she experienced in her teaching.

> What you do is you teach, after teaching you give an exercise for the pupils to write, then they get things wrong. They have to make corrections of what they have done wrongly so they do the correction. After doing the corrections, what I have noticed is if you give them that same test after three days or so, they will not have 100%. Why? Because the corrections were not done properly or they were done for sake of doing... so I am doing a research on that.

Not only did Grace identify a precise problem, she had begun to think of ways to address it. She classified how she had observed other teachers addressing the issue of corrections into systems.

> What I want to look at is the systems of writing corrections because some teachers will come and say, "Okay, for the test we wrote yesterday the answers are as follows..." The answers are written on the board, and the pupils will copy the answers into their books. And some teachers will come and say, "For the test which we wrote yesterday, go and use your notes to write corrections." Then others will say "Okay, let's discuss the corrections in class." And they discuss the corrections as pupils will write them. Some of them will just say "Okay, go and ask your friends," or "Check with your friends for the corrections."

She then developed the different systems of corrections that she planned to use in her research.

> So I am going to use different methods. I am going to have four groups; the first group will just go and do the corrections at home. The other group, the teacher will just provide the answers. The other group the teacher and the pupils are going to discuss, read the question, analyze the question and get the answer, and then they write the corrections. And the last group will do it individually in the class, reading notes, reading the question and answer individually. Then after that take three days and come in with the same test. Get all the pupils from the four groups to write the test, and then we will see the performance.

She viewed the research she was doing as an extension of her teaching and not something separate from it.

> I think they work hand-in-hand because with the teaching is normal way of teaching when you have to teach and make them write corrections, mark the corrections and to monitor the corrections. So it's not out of teaching it's one and the same thing.

Grace planned to start conducting the research in the second week. She wanted the first week to get acclimated with the school. Her Form II class, which she used for her CDS study, had twenty-eight pupils, but other classes had up to thirty-seven. Like the other schools, students wore uniforms and the classrooms were sparse – not much other than pupils' benches and a chalkboard.

She planned on discussing with her Head of Department (HOD) to get an idea of the general behavior and attitude of the pupils. Using that information, she figured out how to put them into heterogeneous groups for corrections. Like the others, Grace had not begun her literature review; she was hoping to start on it once on TP. Her only concern with conducting the research was how to do the data analysis. Otherwise, she was confident about doing what was ahead of her.

When I visited a few weeks into the term, Grace had the groups firmly established. For the most part, she used time after school for the groups to work on their corrections. She posed questions to the pupils in groups to better understand why they made the same mistakes on a test after they did corrections of the very same test. The groups discussed questions such as: which questions were tricky, which questions were simple, what were the problems you faced, and how you discussed the corrections.

Grace knew that the problem rested deeper than the pupils being slow, dull, or forgetful. She was perplexed when some pupils would miss twenty-four out of twenty-five in multiple-choice questions. She looked deeper to understand

the problem. Through questioning, she discovered that language, i.e. pupils not understanding the questions was the root of the problem.

> What I have found out is that most pupils, their problem was on understanding the question. They say the problem is one – the language, so they were not understanding what the question really required because of language. So they were saying English is difficult for them, but you cannot teach in ChiShona [the local language]. That's the problem. But the other group suggested that just simple English should be used. That's why they found some of the other questions tricky, because they couldn't understand exactly what was required. Then after rephrasing the question into simpler words, they say "Ah ha", saying they are knowing the answer to the question, but they'll not be understanding the question.

While exploring in groups, pupils thought that questions that asked pupils to "discuss" were tricky because they did not know what it was they were supposed to discuss. They thought that "which" questions were simple because they could more easily guess the correct answer. Grace also understood that language was a problem in not just understanding the question but for pupils giving answers too.

> They may not be able to express themselves in English. They may write something, which, if you read, you will know that he is trying to say this. But if you put a wrong word the sentence may mean something else – very different from what you want to say. So that's the problem. They get some of the things wrong, not because they don't know but because they are not able to express what they know in an exact way.

Some of the time, the pupils had no idea what a particular term meant. On the particular test which the pupils were doing the corrections, all the group members had failed to give the definition of "percolation." Only one pupil had managed to write something on it. When Grace asked, all of them had claimed to have heard of the term, but none of them could say where or when they heard it. Then they were asked what they should do if none of them knew anything

about the answer. Their responses – discuss it in the group, ask another group, look in their notes – did not seem to lead to an easy solution. No one mentioned the idea of asking the teacher who was right there with the group.

In another group, one student seemed to have most of the answers. When asking for answers in English, other group members continually turned to him. However, when the group discussed the question in ChiShona, all group members participated. When discussing this situation with Grace after the lesson, she theorized that pupils view English and ChiShona languages differently. English was for "getting it right", i.e. giving correct answers, and ChiShona is for discussion and understanding.

> When they start talking Shona they will explain something until it is got by everyone, unlike in English. Someone will just say, "Okay, percolation is the getting of water into the ground to the bedrock," and he or she will not understand that but will just say "Okay" and that is that. Full stop. But if they start to discuss in Shona, they maybe even [begin] some argument. If someone is saying "Ah no, that one is not true. That one is infiltration because percolation goes deep, deep down and will not be used by plants but with percolation the water just gets down and will be used by plants." Then you will see now that they are trying to get the differences between the two.

Grace used the test scores as well as observations and interviews for data collection. She was critical that some of the interviews might be biased.

> It's very difficult to find out exactly the truth. So maybe if I pick a sample from the pupils, then there are pupils who tell their truth, so maybe if I pick those and ask them. Say, "Okay, I want to help you. Tell me, tell me did you exactly understand what this question was looking for?" Then he will tell you exactly what he knows or whether he understood or not, but if you do it as they were in groups, they will lie to you. That I know. So maybe if you take them individually, then sit down with them, and ask them, and you say "Okay, I am helping you." They will say out openly.

Grace did see improvements in most groups when they did the corrections. She noticed an increase in "sensible" corrections in all groups. Contrary to expectation, the group working independently showed improvements equal to or greater than the one she was leading. Rather than refuting the data or changing it to fit her previous hypothesis, she looked for explanations.

> Maybe if they are doing this on their own, they take much better time to concentrate...because some of the slow learners. It's not that they do bad, but the pace at which they understand is a very slow pace. So maybe if you are discussing it when you are in class, if the time is not enough for them to conceptualize all the factors you are talking about... Maybe if he or she is doing it all, he or she will give themselves more time.

Grace's report was straightforward and she gave clear evidence to support her case. She included several graphics – five tables and eight graphs, some of which were redundant. Missing was a description of what happened in the four different groups, i.e. how were pupils' experiences different in each group. However, her tutor did not make this observation. Like Auther, she received a seventy-five percent and very few critical comments.

The assistance I gave to Grace was minimal. She had her topic well defined prior to meeting with me. During interviews and observations, I probed her with questions that she had obviously thought out beforehand. She had developed a clear research plan and followed it. Even with uncertainties of data analysis, she was critically examining what the information meant – looking deeper than the obvious. Unlike the other three student teachers, Grace began the process with the necessary tools to complete an action research project. She understood that research and teaching were a dialectical relationship of reflection and action. She also was able to conceptualize her research project to

understand what she needed to do to get the project going and to collect valuable information. Clearly, she knew what she was doing, and as a result she was able to discuss her research in a productive manner. Rather than reinventing the research topic, she looked deeper into the problem and the solution she was attempting to implement. These valuable skills and attitudes were not the ones the college developed. Grace came to teaching practice prepared, that is, she "had it."

Analysis

Tobias, Patience, Auther, and Grace were not unique students at BTTC. There were many others who could have fit into each of the previous categories. In terms of "not doing it", Joyce and Tafadzwa stood out as two different examples. They were teaching mathematics and history, respectively, at the same school. Their cases were much different, but both students did not do the actual research project. Joyce was always vague about her topic when we discussed it. She identified her problem as some pupils had been previously taught some mathematical concepts while others had not, so she wanted to know how to deal with the discrepancies in background knowledge. She planned on giving an "assumed knowledge test", which she knew could have been an indicator of pupils' lack of revision, not understanding topic, or simple errors. Each time I asked when she was going to begin her approach, Joyce gave me different reasons for not being able to start. Finally she stated that she would begin the study with "Sets and Pythagorean theorem," a topic that did not come

up until the last term of the year[17]. We never discussed what the next steps would be, i.e. how would she teach differently to meet the needs of the pupils with a variety of experiences with the topic.

Tafadzwa was much more open about discussing her CDS project, but that was not enough for her to do the work in earnest. She began TP with a general idea for a topic; pupils not attending lessons or pupils not writing their work. Within the first weeks she felt compelled to address a real problem that she was observing in her classroom: a pupil with HIV/AIDS was being ostracized by classmates in the classroom. I encouraged her to use the issue as her CDS topic because it was a real problem of which she was concerned. I thought that the parallels of bullies in the classroom were too similar to those in World history to be ignored. I believed that it would be a good issue to initiate the CDS process. While we discussed what was happening in her classroom in relation to the bullies, Tafadzwa however, never started the process of developing curriculum to address the issue of bullying.

Like Patience, Joyce and Tafadzwa turned in a CDS report and graduated from BTTC. However, none of them could claim to have actually have done the research project. They all came up with a topic and used some tools to collect data, but *they did not implement a different strategy in their teaching to address the problem* of their topic. Their intent of actually doing the project is unknown, but the result was that they did not attempt to change their practice. As will be

[17] Student teachers in academic subject areas engage in teaching practice for a entire school-year.

discussed later, students not doing the project is a common perception among many lecturers and some students.

At the other end of the spectrum, there were other examples to join Auther in "getting it." Patricia, a Geography student teacher, knew she could not get through the whole year-curriculum for Form Threes during her TP year. Instead of trying to race through the different production sectors of Zimbabwe, she organized pupils into groups where each researched one area in depth and then shared with the rest of the class. While cooperative learning techniques have been common practice in many US schools and teacher education programs for over the past two decades, Patricia and most Zimbabwean teachers have not been exposed to it. Patricia developed a portfolio of assignments for the pupils to complete, organized time for groups to meet outside of class lessons, and continued to assess groups' progress. Like Auther, she did not have a clear vision as to what the whole project would entail. They both continued to struggle and learn along the way and, in the end, they succeeded in doing something they would not have otherwise attempted.

There were many more examples similar of Tobias "Not getting it" than there were similar to Grace "Had it." In the following section, I describe how many students chose topics like Tobias's that were obvious. Analysis of questionnaires shows that most students did not "get it" in terms of understanding the research process. Three major issues emerged from looking at the four case studies of Auther, Grace, Patience, and Tobias that reflect common experiences at BTTC. They are:

1. Choosing a topic is a process, but it was not recognized by many students and tutors
2. Many students (and lecturers) did not conceptualize research and connect it with learning to teach
3. Preparation and support were minimal and inconsistent

For the most part, students were on their own to figure out what was commonly referred to a "this animal called the CDS." In some vital ways the students needed assistance in understanding the research process in order for it to be a meaningful aspect of their becoming reflective and effective teachers. In the following sections, I will discuss each above issue in more detail.

Issue 1: The Process of Choosing a Topic

Often students chose topics that for one reason or another led to poor research projects. Tobias, Patience, Auther and Grace were given the task of identifying a problem in the classroom and developing a topic. Then they submitted their topics to their CDS tutors for approval. This process of generating a focus for a study without assistance was setting up many students for failure.

Two of the focus students changed their topics while they participated in the study – "Comparing field trips with simulations" to "Effects of having pupils develop farm dream plans" for Patience and from "Codeswitching" to "Rewards" to "Absenteeism" to "Pupil ownership" for Auther. These two were not the only ones. The following year (2001), I interviewed and discussed topics with twenty students doing their CDS research project during TP. Of those, only five did not change their topic from their original plan. Auther's and Patience's topic development followed a common trend. They started with topics that they

viewed as being feasible or easy to do. They knew that the topics had been done before and would be approved by their advisor, but they did not feel any great interest in pursuing it. There was no passion or curiosity when they described their original topics, but that changed when they started to think and discuss their actual interests.

Of the twenty interviewed in 2001, ten made changes to their topics that were improvements in terms of being connected to a real problem and/or solution that they cared about. Like Auther and Patience, some completely changed how they approached the research. For example, some changed their topic from comparing two teaching strategies to looking at a real problem in their classrooms. One student began with "An investigation into the effectiveness of the demonstration method versus field trip" and replaced it with "Examining lack of detail in practical diaries." Other students kept their original area but became much more specific. One student started with "Effects of streaming on performance" and developed to "To investigate the effectiveness of using slow learners as leaders in heterogeneous groups in building studies."

Not all students improved their topic with their change. Three students changed their topics, but did not develop ones that more effective. For example one student began with, "Effects of resources on pupil performance" and switched to "Effects of staff turnover on pupil performance." Both of the topics offered no solution to a fairly large problem. Two students changed to topics that were less practical for a CDS project. For example, one original topic was: "Individual other than group work can help improve appreciation of work in

garden" and was altered to "To investigate why pupils drop agriculture at the school." The new topic was on an issue that she was not prepared to address during her teaching practice term.

The other student selected a new topic that she already knew the answer to: "An investigation into whether Form II pupils practice what they are taught on dietary guidelines." (Her original topic was "An investigation on how extrinsic motivation instill hygienic safety precaution to Agriculture Junior Certificate pupils.") In both cases, the changes were initiated by their advisors, who rejected the first topics. Rather than helping the students work through their ideas of a topic to research, their tutors sent them away to come up with a new topic. For many students it was a "hit or miss" process, where many students opted for an easy way out by picking a common, uncontroversial topic.

On the other hand, receiving assistance in the process of developing a topic, did not guarantee that the project would be a success. Patience and I worked together to create a topic that she was interested in, but she did not complete her project. Conversely, Grace had stuck with the same topic from beginning to end, and it was something that she internalized and felt compelled to pursue.

Many more students had similar experiences to that of Tobias. While 75% of the students I worked with changed their topics from their original plan at the beginning TP, their cohorts reported a much different story. In a questionnaire administered to all vocation/technical and PADE students who had just completed TP (June 2001), only 22.3% (47 out of 157) reported changing their

topics. Of the academic students (May 2002), the figure was only 16.6% (35 out of 211.) Perhaps students were more reluctant to write about changes in a questionnaire than they were to discuss it in an interview. However, another explanation could be that students did not change their topics from the ones they submitted to their tutors because no one challenged them to try something new and interesting.

An examination of the topics reported in the questionnaires, showed that they were greatly lacking in terms of being vague/ambiguous, not proposing a solution to the problem, and the answer being obvious or known. In the 2001 vocational/technical and PADE questionnaire, the largest group (39.8%) of the reported topics I classified as vague. I categorized vague research topics as being so general that they could have covered a wide range of areas to study. Examples are "Pupil participation in class (group work)" and "Effective methods when teaching buttonholes." There could have been a dozen possible topics focusing on how group work could have been made more effective, e.g. size and longevity of groups, organization of tasks, and identification of roles of group members. The same is true with effective methods of teaching buttonholes.

Even more of the academic students (57.4%) in their questionnaires gave topics that were also ambiguous. These topics include: "How to motivate pupils through the use of incentives," "An investigation on the most effective method of teaching reading comprehension," "Socio-economic status on pupil performance." Some subject area sections reported to have given their students areas of study. For example, the Mathematics lecturers gave their students four

areas to pick from: Gender, Codeswitching, Socio-Economic Status, and Streaming. From those areas, students were required to develop a topic, however, most of them simply took the area of study as their topic.

The second largest classification of topics in the vocational/technical and PADE questionnaire (30.3%) focused on specific problems in the classroom, but they did not present possible ways of addressing them. Examples are "Causes of tool breakages at form I", "Problem of lack of creativity in design", "An investigation to establish reasons why pupils are not doing their homework." These are fine problems to start the research process, but finding ways to address these problems and gaining an understanding of why the solutions worked or did not work is an integral part of the action research process. Fewer (11%) academic students' topics fell into this category. Examples include: "Impact of inability to distinguish between 'describe' and 'explain' in geography" and "Causes for negative attitude towards History by pupils."

Another significant problem with topics included students picking topics for which the answer is known prior to the start of the project. Twenty-five vocational/technical and PADE students' topics (11.8%) fell into this category. Examples are: "The perception of pupils towards agriculture practicals," "Effectiveness of using models when teaching diagrams," and "How shortage of equipment affects performance." For the most part, there is general knowledge that pupils do not like agriculture practicals, that using models (or any teaching aid or strategy) can be effective if done appropriately, and shortages of equipment do not help the teaching/learning process. These topics could have

been altered to be more effective, i.e. identifying activities that would help pupils to enjoy agricultural practicals, identifying new ways of using models more effectively, and identifying ways of making teaching/learning effective with a lack of particular resources. A similar percentage (11.6%) of academic students also came up with topics with known answers. These examples include: "Importance of teaching aids in the teaching of advertising in commerce" and "The effectiveness of continuous assessment."

The lecturers complained that most students were comparing one teaching method with another and then indicating which one is better. The common example given was, "A comparison of the lecture method versus the discussion method," and students find that the discussion method is more effective. Issues of contexts of when using the methods or looking at how the methods are being done are ignored.

While this was a problem in the past, by 2001, fewer students were still choosing such topics. Only 3.3% of vocational/technical and 2.6% of academic topics were labeled as such. Tobias's topic of comparing the effectiveness of charts versus that of models could have fit this category. Having interviewed him, the topic could have also been classified with the one above – already knowing the answer. Another example from vocational/technical is, "The effectiveness of group versus lecture in teaching cultural pest control concepts in agriculture AJC." It is nonsensical to do such general comparisons of one method's effectiveness over another. Each teaching method can be effective if done well at an appropriate time, but they accomplish different things in terms of

teaching and learning. Usually, a student preferred one method to another, which was fine – all teachers are better at some ways of teaching than others – but a student should not have confused the method with which they are most comfortable with the "most effective" method. To improve the topic, they could have identified ways to make one strategy more effective.

Examining the effectiveness of a particular strategy was one category that contained several topics that seemed to meet the ideals of action research and the CDS. Like Auther's (examining if pupil ownership of plots leads to improvement of attendance and attitude towards practicals) and Patience's (Effects of having pupils develop farm dream plans) topics, some of these identified a specific problem and then tried something not normally done to improve the situation. Seventeen percent of Vocational/technical and PADE students' topics were classified as such, however, not all the topics were clear and specific. Examples of the better ones include: "Use of slow learners as leaders in heterogeneous groups on performance in agriculture" or "effects of different group sizes in pupil performance." Some of the more ambiguous examples were: "Group discussions effectiveness" or "Effectiveness of group work to improve pass rates." While only 7.9% of the academic students' topics fit this category, they were generally clear and specific topics, such as: "Effectiveness of drama in teaching characterization in literature," "Using handouts in place of textbooks," "Effectiveness of flexibility training in executing a lay-up shot in basketball," and "Effects of sitting arrangements on pupils' performance."

Grace's topic (comparing four strategies in improving how corrections are done) belonged to another category that yielded some of the better topics – comparisons of two similar strategies in teaching. Only 4.7% of vocational/technical and PADE and 1.9% of academic students' topics belonged to this grouping. Some other examples included: "Individual homework compared to group homework" or "The effectiveness of teacher-derived grouping and pupil-derived grouping," and "An investigation into the teaching of English classics as compared to the teaching of African written English literature at O'level with specific reference to O'level pupils at __ School."

Further, while most of the lecturers stated that students' topic selection was generally poor, most students thought otherwise. On average, vocational/technical and PADE students rated their topics a 3.7 and academic students 3.5 on a five-point scale where 3=satisfactory and 4=good. Even the academic students who had ambiguous topics rated theirs 3.4. For example, one such student who rated his/her topic a 4 (Good) had a topic of "The effectiveness of teaching aids." The justification s/he offered was, "There is literature from different authors." The student could have produced a quality CDS project, however, the topic did not give direction for a focused study. It was unclear which teaching aids would be used, how and when they would be used.

Way Forward – Topic Selection As a Process

I joined Mr. Machera, the Lecturer in Charge of Professional Studies, in visiting lecturers in each vocational/technical and PADE section in November 2001 and each academic section during May – June 2002. The goal was to

dialogue about problems and possibilities of the CDS. Topic selection was a primary issue. Lecturers were quick to identify problems with topics. While many lecturers did acknowledge an improvement in students no longer "comparing the lecture method versus discussion method," there was consensus that topics were generally very poor. Their reaction to the list of students' topics included that they were: too vague or broad, shallow, repetitive, not authentic/plagiarized, too theoretical/not based on real problems, without a specific intervention, something that is already typically done in the classroom, and "non-sensible."

Mr. Machera and I put the section lecturers to task and asked them to develop model topics using students' topics or their own. We believed that not only did pupils need to see examples of good topics, but also that the dialogue of how to develop a good topic needed to begin at the college level. The vocation/technical and PADE sections were more receptive than the academic sections. Most of the latter group offered to give us their topics in a couple weeks after they had discussed it and developed it as a section. However, there was no follow through.

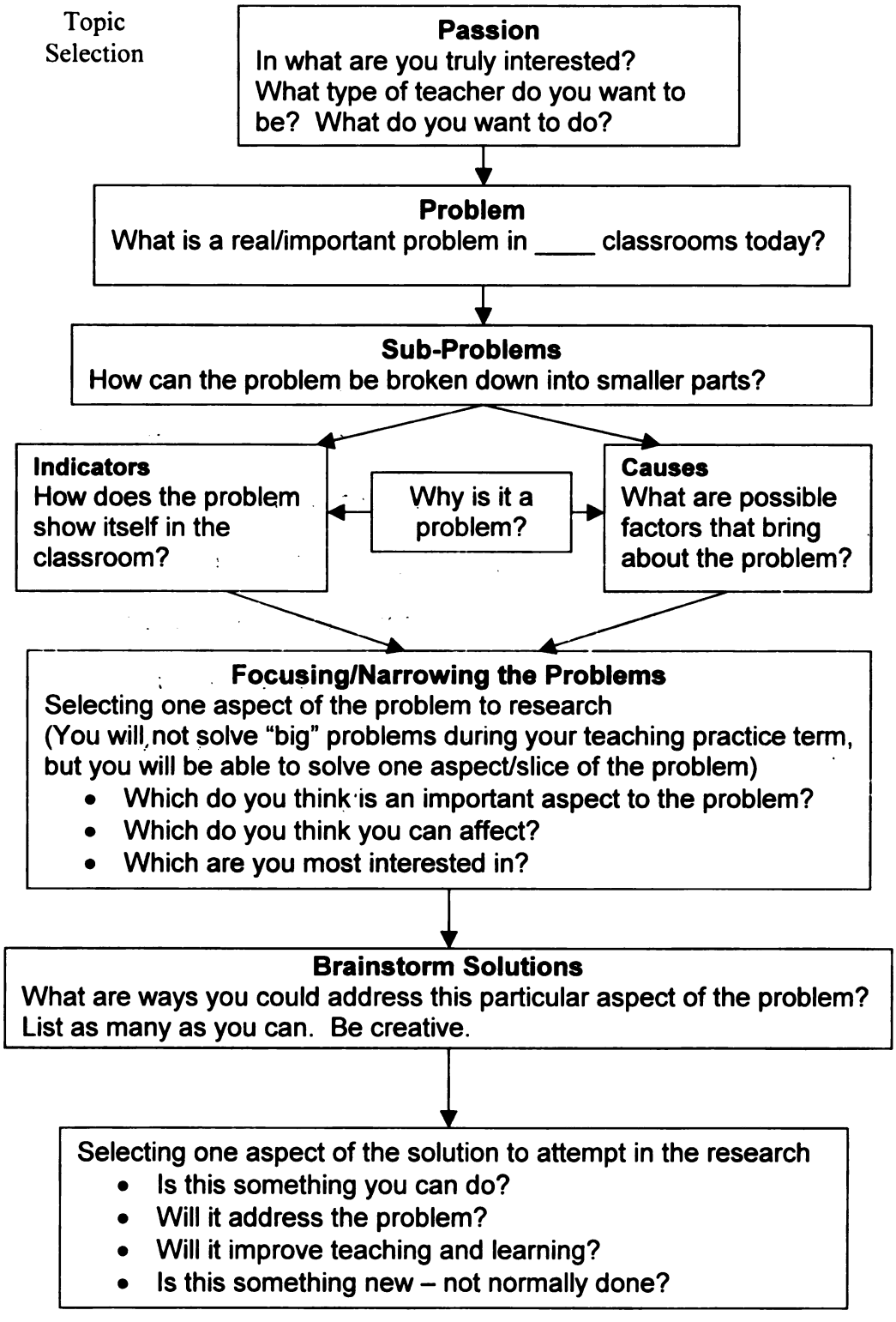
The discussions with the sections that did develop topics followed a similar pattern. The first step was identifying an issue that was based on or related to a problem that occurred in the classroom. Most sections used students' topics to pick ones that were realistic and interesting. The second step was focusing the issue on a specific problem. At this stage, the lecturers theorized or made hypotheses regarding why the problem exists and what is the crux of the problem, and then they decided which aspect of the problem is

indicative of the larger issue. The next step was identifying possible ways to address the problem, i.e. what can the teacher do? The lecturers brainstormed as many possible solutions as they could; then they picked one to develop further. The fourth and fifth steps, developing the possible research approach and identifying possible theories that may come out of the research, were discussed in the sections. In the former stage, the lecturers would have discussed which research techniques would be effective. In the latter they would have identified issues of why or why not their way of addressing the problem would work and under which necessary conditions. However, only one group proceeded to develop their topic to either of these stages.

An example of a section's lecturers that developed a topic from a real problem was the computer section. They described how tests in the subject area usually measure students' ability to memorize and not their abilities to develop software. They decided that developing appropriate assessment tools would be a worthwhile CDS project that addresses the problem of poor tests. See appendix for the model topics offered during section visits.

To show the process that came out of the lecturers' discussions in the first session of the January-February 2002 CDS workshop, I developed the following chart.

Figure 5.2 – Process of Topic Formulation



This new approach of viewing the development of a topic as a process is much different from the common practice of an advisor telling his/her students to submit their topic by a specific date without any consultation. One limitation was the lack of experience the students had in viewing the classroom as a teacher-researcher and as a result identifying real problems in the classroom. An unresolved conflict throughout the college was deciding upon the deadline by which students should have their topic.

Some lecturers and students argued that the topic should be developed once the student had begun TP and experienced some of the problems of the particular classroom. On the July 2001 questionnaire, a vocational/technical student doing TP in or around Harare stated, "Students should not be coerced into getting/finding a CDS topic before exposed to the real classroom situation. It makes the CDS less effective and less practical but more theoretical."

Others at the college reasoned that students did not receive much support from their tutor once they left for TP and students were so overwhelmed in their placement that they neglected to develop a topic until the term was nearly over. On the same July 2001 questionnaire, a different student wrote: "Students should have their topics approved before leaving college for teaching practice so that they complete their projects earlier during the course of the term." While I supported the latter view and added that it was easier for students to develop and change their topics than it was to begin the process during TP, I believe that improvements in preparation and support was needed (as discussed in the following sections.)

Issue 2: Problems Conceptualizing the Research

Related to the problem of students and tutors not viewing topic selection as a process is the ways in which students and tutors view the whole research process. Students had very few models of what a quality research project looks like. Rather than having a general understanding of how the whole research process fits together and assists teaching and learning, many students searched for a set of procedures to follow or a past project to copy – figuratively and literally. Grace was one of the few students who picked a topic that related to a real problem she experienced as a teacher, used the research project to develop ways to improve that problem, and then reflected deeply about her practice and how to better assist pupils. She understood the pertinent issues involved before she started conducting the research. She knew that teachers primarily use four approaches to get pupils to do corrections. She also knew that not all the approaches were effective for pupils to understand the mistakes they made on tests. By doing the research, she wanted to understand pupils' experiences in doing each approach – not to find out which one is "the best" but to have a better understanding of ways to improve pupil learning. The questions she asked as a researcher, e.g. "Which questions are tricky?" were the same ones that helped her improve as a teacher.

A requirement of good research does not necessarily involve charting the course of the research project from beginning to conclusion. Did Grace know that issues of language would become prevalent when examining how pupils understand doing corrections? I have no evidence that she did. She did suggest

that she was more concerned with pupils' attitudes towards doing corrections and their abilities to analyze information. Also, conceptualizing the research does not suggest knowing the findings beforehand. I believe the contrary is true. If the researcher truly understands his/her research and how it fits with his/her teaching, s/he would be more open to a wide variety of possibilities to come out of the experience. The difference is *knowing what one is looking for* and *not knowing what one will find.*

The other three students (Auther, Patience, and Tobias) did not have as clear, holistic vision of their research projects and how they fit into their teaching. Through time and engaging in the research, Auther realized that he was essentially examining the issue of pupil ownership and identifying a dialectical relationship between teacher and pupil responsibility. After completing TP, he was able to reflect and see how experimenting, listening to pupils, and continuing to search for solutions became a part of his teaching.

Conversely, Patience started off with clear goals but ended up failing to see the purpose of doing research. She was unambiguous why she wanted her pupils to do a "dream plan." From the first conversations with her, she wanted to improve pupils' interest in the subject of agriculture. She was well aware of their negative attitudes and beliefs that agriculture is a low status course of study. However, by the time she completed TP, she had not developed further understanding of pupils' attitudes or ways to integrate improving attitudes into her teaching. The research process remained isolated from her teaching and, in the end; she found the exercise a waste of time.

Tobias represents the case of conceptualizing research in a way that the answer is a foregone conclusion. There was little ambiguity in his research. He was impressed with models and he wanted to prove that models were more effective than charts. By knowing what he was going to find, he knew what he was looking for; models are more effective. The methods of collecting data were perfunctory. Knowing the answer left little reason to ask the question. With this limited conceptualization of research, Tobias was not open to exploring deeper issues, such as what is it that pupils learn from models that they do not from charts, or what does it mean for pupils to interact effectively with models.

Even though the four students used a variety of approaches of data collection including quantitative and qualitative methods, none of them gave narrative descriptions of pupils' behaviors, attitudes, or feelings. The students relied on quantitative measures as evidence for their findings. This suggests that the analysis part of the research process remained partly mystified for students. Rather than having used observations or comments from pupils, the student-teachers developed charts, tables, and graphs from numbers, some of which had questionable origins. Either the students felt that numbers gave a more convincing argument for their findings than did the voices of the pupils, or, like Auther, they did not know how to go about including qualitative research in the analysis and write-up.

Attitudes Towards Conducting Research

Patience was the only one of the four students to openly display a negative attitude toward the CDS project, describing it as a waste of time.

However when I interviewed twenty-five students engaging in TP the following year (2001) in a variety of schools in the Harare area, I discovered other students who questioned why they had to do this CDS project. When the question was turned back to them, most often they could give a decent justification, but they still did not seem convinced that it was a worthwhile endeavor. One student offered that doing research led to wide knowledge about something, that is trying to find solutions to problems. I suggested to her that it would help her to think about what works and why it does so she would always be improving her teaching and learning in the process.

Another student was not so easily convinced of the efficacy of the CDS. He argued that:

> It [the CDS] is not taken seriously – the way it's done doesn't serve any purposes. The tutors are not qualified – the CDS gets guidance from PS, but tutors are from various subjects and [they are] not informed of PS. Tutors aren't experienced. There is no follow-up with lecturers. The guides are misleading – not serving the purpose of guiding.

Students were more candid on anonymous questionnaires. I gave such questionnaires to the same twenty-five students I interviewed during TP of 2001, eight of which rated their overall experience of doing the CDS research as "not good." When asked why, most wrote about problems related to doing the research, e.g., "Because I am not experienced in the CDS" or "I do not have enough time to gather necessary information." The seven students who rated their overall experience as "good" or "best possible" gave clearer indications that they understood the purpose of doing the research. Some focused on having the opportunity to make changes and/or do something different in the classroom,

e.g., "This enables one to come up with specific problem-solving tactics one initiates or acquires." Others stated that they understood what was expected in the process, e.g., "So far the concepts I've done I understood clearly."

On another questionnaire administered to all (211) vocational/technical and PADE students who had completed TP in September of 2001, a student was even more direct on the last question, which asked if there was anything else they wanted to include. The student wrote, "No understanding of 'why' the CDS project is done or who does it benefit afterwards. It's just an exam gimmick." Three other students made similar remarks on the same question.

One clear finding is that the students who claimed to have a positive experience also indicated a better understanding of the purpose of the research and how it is an integral part of their learning to teach. The finding was further supported with many examples. On the 2001 questionnaire to 211 vocational/technical and PADE students, 1.9% and 13.3% rated their overall experience as "terrible/ a mistake" and "not good" respectively. Most of these blamed the lack of assistance in preparation and during TP (to be discussed in the next section.) One of these 18 students mentioned, "I am always facing problems but I get no assistance." Others focused on not having enough time and not understanding the process, e.g., "I am failing to make sense out of it." A similar questionnaire for academic students given the following year yielded similar results with 3.3% and 15.3% rating their overall experience "terrible/ a mistake" and "not good" respectively. Other than criticizing the supervision, common comments related to not seeing the point of doing the CDS, e.g., "I

learnt nothing new. It was a formality to do it. Not interesting but rather a bother as it was cooked" and "I learnt nothing and does not even see the important part it played in my learning to become a teacher."

Of the 40.1%, 32.2%, and 5.2% of vocational/technical and PADE students and the 43.3%, 33.3%, and 4% of academic students who rated their overall experience as "satisfactory," "good," and "fantastic/ best possible" respectively, most focused on learning something, being able to accomplish something, and understanding how to do the research. The 142 students who wrote about learning something about teaching and/or doing research indicated that they understood the purpose of the CDS. For example, one student wrote, "I have learnt from my mistakes that if given a next chance, I will choose a relevant topic which I will be able to solve skillfully." Other comments providing evidence of understanding the purpose of the CDS were:

> It enables me to solve problems practically in a logical and diplomatic manner.
>
> Gave me the insight on confronting problems and try to find ways of solving them and how to improve on weaknesses.
>
> I have learnt to appreciate pupil's weaknesses and their variations. Abilities differ so one has to be objective.
>
> It gives an insight on researchers on how he should look for problems in classroom situation which may help him to improve them.
>
> It instills a critical thinking and rationalizing of classroom activities. Reduces generalizations in teaching various concepts.
>
> I have ideas and methods to use to solve the failure of girls in science at Zim sec schools.

The sixty-six students who wrote about accomplishing something in doing the research gave comments ranging from simply being able to do the work, e.g. "Was doing the expected thing at the right time" and "At least I could write my own CDS and was approved" to being innovative, e.g. "It was something that no one had ever attempted" and "I managed to grasp enough information on how to handle certain problems in the teaching process such like the need to critically look into problems concerning pupils' performance, discipline etc." Several students discussed being given the opportunity to do something not normally done, e.g. "Because I got to put into practice things I had learnt in theory, proving whether they were right or wrong."

All except one of the seven vocational/technical and PADE students who rated their overall experience as the best possible wrote about understanding how to do the research. They gave comments as: "I have experienced very little problems through out" and "I found it easy to write my CDS after reading the CDS guide." Ironically, these students seemed to equate ease with having a positive experience. Conversely, I believe that struggle is a vital part of action research and learning to teach. Thus, the obvious conclusion is suspect; just because students claimed to have a positive experience does not necessarily mean they were able to conceptualize how the research process was an integral part of teaching and learning.

Rhetoric and Reality

It is one thing to state the values of doing research, and something much different to actually engage in or support a research process that reflect those

values. Throughout my research at BTTC, students, lecturers and administrators openly discussed the benefits of doing research, and very rarely did anyone criticize the idea of attempting to do research. It is difficult to separate what was mere rhetoric from what had become internalized views, especially on a large scale. Nonetheless, I asked large groups of students what they thought about research: what is it, what is the purpose, why is it important.

In general students offered a functional view of doing research. Similar to the findings of Gitlin et al. (1998), which argued that student teachers doing research for the first time view the experience in terms of getting short term answers rather than a way of sharing "ways of thinking." Of the PADE cohort a year following Auther's, just over half (53.7%) of the 80 students defined the CDS as *identifying a problem and solving it*. Most comments were similar to, "A research aiming at identifying a problem at a school and try solutions to end that problem." Fewer students (46.3%) wrote a similar statement for defining "research," e.g. "Finding information on a certain aspect and finding possible solutions of the problem."

Some students described the CDS and research using concepts of constructivist thinking. Twenty-four out of eighty students (30%) wrote definitions of research as *an investigation*, e.g. "A continuous process of investigating on an issue of concern." Seventeen others (21.2%) wrote of research as *seeking knowledge or truth*, e.g. "A process of discovering new facts or concepts through interaction with the environment." In describing the CDS, three students mentioned creating new ideas, e.g. "Finding new information or modify existing

trends of information about teaching and learning process." And two other students included developing theories, e.g., "Finding a problem in teacher-pupil relationships or leaning and finding or developing own theories which might combat the problem."

Most of the definitions were clear and straightforward. Only two students used technical jargon to explain their views, e.g. "A study which can be done by a scholar which might be qualitative or quantitative having objectives and hypotheses as its components."

Another questionnaire given to twenty-five vocational/technical and PADE students a month later revealed similar results. The most common response (44%) to "Why is it important to do research?" reflected functional thinking of solving a problem. Most wrote something similar to, "I can identify a problem in class and research on it with intention to solve." Eight students (32%) discussed improving understanding of an issue, e.g. "To have a wide knowledge on the problems encountered in teaching and learning." And two used concepts of constructivist thinking in their reply, e.g., "Because I should be in a position to discover new things on my own," and "It leads to reconstruction of ideas in certain situation hence development."

In terms of looking at the rhetoric, students were able to clearly identify valuable reasons for doing research. While most often they focused on the functional value of solving a particular classroom problem, some did focus on the learning that was developed in the process. Unfortunately, the reality of students' work did not fit their articulated views of research.

Those Who "Got It" – A Minority

Even though some students reported finding the research process as "easy" or "understandable", I came across very few students like Grace, who were able to demonstrate how all the pieces of the research process work together to grasp the major issues involved. In a September 2000 questionnaire given to the forty-student cohort of Grace et al. – which had just completed TP – I came across only six responses that presented a consistent approach where their topic, problem, and methods of data collection corresponded with each other. I also looked at what the students learned from the experience. The responses are shown at the end of this section. Not all of these six students had as coherent understanding of their research as Grace. For example student #58 had a fairly vague topic – "An investigation into the causes of absenteeism and its impact on teaching and learning process," and s/he did not include any way of addressing the problem or indicate much learning through the process.

The following year, when I visited twenty-five students in their TP placements, I found students reflecting a wide range of understanding how their research fits together and assists their teaching. One student who shared deeper insights realized that pupils were not doing homework assignments in technical graphics. Rather than focusing on the common issue of motivation and rewards, he tried to re-think project work so that it would be more conducive to homework. He made his assignments more open-ended so pupils could use tools from home. Also, he began to develop theories about giving pupils opportunities to succeed.

At another school, all four BTTC students had their own topics at the beginning of the term, but within a couple weeks they all decided to work on the same topic in their respective subject areas. They examined "The effectiveness of using slow learners as leaders in heterogeneous groups" in building, computer studies, and agriculture. They met weekly to discuss research practices as well as how to organize pupils into teams and how to support the team leaders. While they found some controversy when pupils who had been isolated in the past were made team leaders, they observed substantial changes in the confidence and performance of some of the slower pupils.

Not Getting Started – Not Knowing the Next Step

Even though some of the twenty-five interviewed seemed to "get it", they all seemed to struggle at the beginning. An indication of students not viewing their research holistically was that they had a difficult time getting started. My first visit to the twenty-five students came during the first three weeks of their 2001 TP. None of them had begun doing the research. All had identified a problem or a topic, but each gave various reasons for not moving ahead. The most common reason given was not being able to do the literature review – actually, none of the students I had worked with had done one prior to TP. They could not find their topic in the library, they did not have access to a library, or they did not know how to go about looking up their topic.

The students' primary problem was that they did not have a clear idea of their next step in the process. Jumping in and "just doing it" did not happen with any of these twenty-five students. While most of the students had clear topics

that they were able to discuss, the approach used to collect data was predominantly technical and complicated. None of the students identified using qualitative research approaches in their initial stage. Many were trying to find ways to measure and quantify things rather than find ways to describe what was happening. I suggested strongly that each student keep a journal for writing field notes of observations and reflections, however the idea was novel.

In two separate instances, students wanted to compare extrinsic and intrinsic rewards. They wanted to measure a change in attitudes, so they organized questionnaires and an experiment where they gave an intrinsic reward to one group of pupils and an extrinsic reward to another group. Then they compared test scores and/or completion of assignments. They were not sure how they could elicit information from questionnaires and tests to make conclusions about pupils' feelings.

Both of these students neglected to address the issue related to the complexity of human attitudes and motivation, and they treated all intrinsic and all extrinsic rewards as a monolith. There is much different meaning between giving a pupil a handclap, a piece of candy, or a large sum of money – all extrinsic rewards. It was not clear how they treated intrinsic rewards other than the teacher doing nothing.

At times, some students appeared to try to make the research overly academic. For example, one student was trying to improve how she did demonstrations in clothing and textiles. Rather than talking to the pupils and asking them how they were learning and if they were enjoying the process, she

created a "social-gram" of keeping track of where the pupils sat and with whom. By using a particular tool she lost sight of a real issue of her research/teaching.

Not Doing Authentic Research

Lecturers were aware that students were not understanding the research process as a whole. When visiting the vocation/technical and PADE sections, the most recurring problem identified was that students were not doing authentic research. Lecturers reported that students were duplicating research projects of the past and/or fabricating the data collected. After the one term of TP, lecturers were seeing students returning to college without having done the research. In the third term (after the students had completed teaching practice), many of them sought guidance on how to do the research, including what data to collect and how to collect it. The exercise became academic and artificial; it lost all practical purposes of learning from trying to implement a new solution to a problem.

Lecturers from several sections relayed that students wanted to be "spoon-fed" each step of the CDS. Building section lecturers indicated that students were "not grasping the most simple concepts and terms; for example, what is a hypothesis." The Technical Graphics section claimed that students did not back their arguments with logical evidence they found in the field and, as a result, the students did not take ownership of the research – and they missed the point of doing the project. Some lecturers discussed how students and external examiners focus on superficial elements of the CDS, e.g., using specific terms in a particular way, having their report typed, or having figures labeled in a

particular way. In the end, the substance of what had been learned in doing the research was neglected.

The academic sections' lecturers related the same problem of students not doing the research while on TP, even though their placements lasted a whole year or three terms. Many lecturers reported that students did not even formulate their topic until they returned to college. Nearly all sections discussed how the projects become too theoretical because the students were not dealing with real problems in the classroom.

Interestingly, very few students related the problem of not doing authentic research in the questionnaires. However, three out of the three hundred sixty-eight of the vocation/technical, PADE, and academic students who completed TP in 2001 mentioned the issue, and they concurred with the lecturers. One student simply stated, "Most people are just reproducing previous CDS." The other two discussed "cooking up" the data: "Some ppls [pupils] are told in their final year that their topic is wrong. Therefore they "cook" information for the sake of doing CDS" and "A follow up should be done (where students were doing TP) to make sure that students are not "cooking" information."

Not Engaging in the Deep Thinking

A questionnaire administered to lecturers in December of 1999 reflects similar attitudes that their students were not getting the benefits of doing research. Out of nineteen questions, the two lowest rated (both rated slightly above being "inadequate") were ones that asked if students were developing personal theories about teaching and if students' research provided useful information.

The chart below shows results the questionnaire. Lecturers were asked to rate a series of statements and rate each on a scale of one to five with the following descriptors: "1) non-existent", "2) inadequate", "3) adequate", "4) good", and "5) excellent." The chart below shows the average points each statement received from the lowest rated to the highest.

Table 5.2 – Lecturers' General Statements from CDS Survey #1		
Statement	**Average**	**Std dev**
In general, the students developed personal theories about teaching	2.39	0.871
In general, the research provided useful information (something not already known, and it deepened thinking on a real educational issue)	2.43	1.0939
My understanding of CDS research in other sections is	2.46	1.0100
In general, the students' editing of the research projects was	2.54	0.6477
The communication with the Professional Studies Section and my Section was	2.58	1.1307
Students' ability to present evidence to arrive at a logical conclusion	2.68	0.7836
My knowledge of how students are prepared to do CDS is	2.71	1.0109
In terms of usefulness, the students developed research proposals that were	2.76	0.8301
In general, the projects were able to integrate theory with practice	2.78	0.8542
The access I have to resources relating to CDS is	2.78	0.8542
The originality of students' work (they did not copy/plagiarize)	2.82	0.8631
In general, the research methods used by the students were	2.86	0.7874
In general, the research projects' organization was	2.97	0.7988
In general, the research topics the students identified were	2.97	0.7632
The students' contact and supervision during the CDS were	3	1
My understanding of how CDS is organized in the college is	3.14	1.0994
My knowledge/background of education research methodologies including action research is	3.55	1.0577
My understanding of the standards and expectations of the students' CDS is	3.57	0.9291
My understanding of my role with CDS is	3.58	0.9481

Fifty-eight PADE students concurred with the lecturers in a questionnaire given a month later. On average they rated developing theories as the lowest of their self- assessment. It was rated 2.78 on a 1-5 scale, and it was the only aspect rated under 3.0 (adequate). On the other hand, students rated their "ability to integrate theory and practice" as the highest at 3.56, suggesting that they feel more confident at using established theories than creating their own. The table below shows the results from the students in a similar questionnaire to the one above.

Table 5.3 – Students' General Statements from CDS Survey #2

Statement	Avg	Std dev
My ability to develop personal theories is	2.78	0.743948
My understanding of analyzing data is	3.02	0.909154
My understanding of research methods is	3.24	0.671107
My ability to effectively organize a project is	3.31	0.790516
My understanding of the research process is	3.36	0.703526
My ability to use evidence to get logical conclusions is	3.36	0.703526
The research topic that I have chosen is	3.44	0.839287
My understanding of how to use the work/idea of others	3.47	0.741733
My ability to integrate theory and practice is	3.56	0.765077

Nine months later – after TP, the same group on average self-evaluated themselves more critically – they indicated a reduction of ratings in six of the nine areas covered. Developing personal theories was one of the few categories that did not decrease. It saw an improvement from 2.77 to 2.92 and rated higher than "My understanding of research methods" (at 2.73) and "My understanding of analyzing data" (at 2.76).

Poor Evaluation of Topics

The way students evaluate possible research topics was another indicator that students were not conceptualizing how the CDS research project relates to

learning to teach. As described previously, many of the students' topics were not based on a specific problem, did not identify a way to address the problem, or they focused on a problem with a known solution. When asked to evaluate possible CDS topics, students more often than not chose topics based on issues of feasibility of doing the topic rather than solving problems or finding new ideas/information. By far, the most popular issue evaluated on any questionnaire was "*The effectiveness of using teaching aids in the classroom*" administered in 2002 to one hundred fifty-seven students academic students who completed their TP. Ninety-seven (61.8%) chose that topic as the best of four. The other topics and number of students who rated it as the best were: "*Use of models versus charts in the effectiveness in teaching concepts*" (25 students), "*Do pupils remember mathematical concepts longer after they handle objects that utilize that concept?*"(20), and "*How does having pupils design a bulletin board improve classroom management?*" (12).

When asked to give justification why they considered the teaching aids topics as the best, most students offered reasons of feasibility in doing the study or they wrote about their importance. Thirty-one students discussed how the topic would be easy to do, e.g., "It is easy to collect data on" or "Researchable." Another twenty-eight students wrote reasons why teaching aids should be used, e.g., "Improves learning in the classroom" or "Helps pupils to conceptualize." Very few students identified a problem within the topic that needed solutions or identified areas of new knowledge that would be gained from the study. Four students wrote that the problem was that teachers were not using teaching aids.

Only one student indicated that the results would not be a foregone conclusion (that teaching aids are effective.) S/he wrote, "Because it is after whether aids are necessary or not – if so, what do they help and [what] will happen if they are not used."

I shared these results to Mr. Mazanhi, the PS lecturer who was teaching the science students who took the questionnaire. He had a different perception of why the students preferred the teaching aids topic. He stated that teaching aids is a topic that is familiar to them, and they hear from their lecturers that teaching aids are good, innovative things that improve teaching and learning. He doubted that students were critical as to why it would make a good CDS topic.

Previous questionnaires yielded similar results. On a questionnaire given to PADE students in January 2000, the highest evaluated topic out of five was, "*Does the use of charts as teaching aids improve pupils' understanding of a subject.*" The lowest rated question was, "*What are the effects of reflective journals in terms of student involvement in class discussion?*" The chart below shows students' ranking from best to worst of research topics.

Table 5.4 – Students' Ranking of Research Topics from CDS Survey #2

Research Topic	**Avg. Rating**	**Std dev**
Does the use of charts as teaching aids improve pupils' understanding of a subject matter?	2.52	1.501
Which incentive – token or praise – is more effective in improving performance?	2.52	1.27
How does working within a group affect students' learning of a particular concept?	2.74	1.049
Attitudes of teachers and parents towards ability-grouping versus mixed-ability grouping.	3.3	1.609
What are the effects of reflective journals in terms of student involvement in class discussions?	3.93	1.061

Students used the same justifications of the former topic being "researchable" and improving learning. On the other hand, students were generally unfamiliar with reflective journals and had not considered how it could be a part of a research project.

Some students tended to evaluate the topics by the foregone conclusions they could make. On the same questionnaire, twenty-four percent of the students chose their favorite topic and thirty-three percent picked their worst topic by giving reasons related to the conclusions they assumed the research would make. One student selected the topic "*Attitudes of teachers and parents towards ability-grouping versus mixed-ability group*" as the best. In his/her response to why, s/he wrote, "Parents and teachers favor the traditional ability grouping. However mixed-ability grouping has some advantages of uplifting the mental capacity of slow learners hence need for research."

Other students were more critical and questioned the value of doing research with a known outcome. Of the few (10 out of 58) students who evaluate the topic on charts was the worst of the grouping, most (8) discussed that it was obvious and known, e.g., "Charts are a well established teaching aid that helps pupils' understanding. The question was proven and there's no need to dwell on such topic."

On a questionnaire administered to twenty-five vocational/technical and PADE students in April 2001, the highest rated topic was, "*Use of models versus charts in the effectiveness in teaching concepts.*" This topic follows the trend of something that is very common to students yet not a real problem or contentious

in any way. The least favorite topic, "*Does involving pupils in planting and rewarding carrots curb theft?*" also follows the trend. It is more innovative, less common, and in this case addresses a real problem.

Way Forward

When dealing with the reality of doing a CDS project, students considered a host of issues, which were different than those discussed in the rhetoric of doing research. Rather than having focused on attempting to use a new approach to address a problem in the classroom and trying to develop personal theories from it, students tried to determine the most expedient way to accomplish an assignment that was vague and complex. This tension exists on many levels. For instance, many student teachers in the US can articulate a vision of good teaching that they wish to engage. However, once they meet the reality of the classroom, their idealism quickly vanishes and they use teaching strategies contradictory to their beliefs. The way to address this tension is not to compromise one side for the other, e.g., to not bother having students develop personal theories of what is good teaching or to have students teach only in environments conducive to their approaches. Some level of tension is healthy for personal and national development.

A dialogue of what is the ideal is important. However, in Zimbabwe, there is little debate about what is good teaching. When I asked Auther, Grace, Patience, and Tobias to describe "good teaching", they gave answers that were general. They discussed teachers who were considerate to their pupils, learning that was fun and connected, but they were unable to give specific ideas of what it

would look like in the classroom. Patience was the only one who could give a tangible example when she discussed the discovery learning she did in early primary level. However, she was unable to transfer the approach to the upper levels that she taught. Concepts of cooperative learning, Socratic questioning, problem-based learning, as well as others are not a part of a national dialogue of what is good teaching. As a result, the actual methods of instruction in the classroom are not being examined on a national level.

On the other hand, what is good research has progressed into a productive dialogue at BTTC, as discussed in the following chapter. The way forward is to continue to develop the dialogue building from the tensions between rhetoric and reality. Through more dialogue, students and lecturers will develop clearer visions of what is good research. Models of approaching research are available – two are provided in the next chapter, but it is more important for students and lecturers to internalize their own model of good research. Through discussion of what it means to do good research and discussions of the reality of doing research in Zimbabwean classrooms, the gap between the rhetoric and reality becomes the sphere for forging new possibilities.

Table 5.5 – Six Students Responses with a Consistent Research Approach from September 2000 Questionnaire

#	Student's Topic	Was it based on a Problem? : The problem	Rating of topic : Why?	Methods of data collection used in CDS project
14	Does involving pupils in planting and rewarding carrots curb theft	Completely: Theft of carrots by pupils	Best possible: It was good because I now have a solution for ____ secondary school	Observation because I wanted to find no. of pupils entering the garden and change of attitude in theft
15	An investigation into the effectiveness of group leaders and task leaders in the learning of a process orientated practical	For the most part: Group members under group leader were not responsible	Good: Group leaders have been a common group leadership	Interviews which indicated perceptions about group and task leadership
37	Grouping pupils by preferences versus random by teacher	Partially: Exodus of pupils from one group to another if grouped by the teacher	Good: Pupils have their own peers they feel comfortable grouping with	Questionnaire because it gave room for pupils to do air out their views on grouping of pupils in a class
56	To find out the effect of random and friendly pairing on performance of holiday duties by agric students	Completely: Pupils not water their vegetable loads over the holiday	Good: This was really a serious problem which worried the administration	Interview cuz it overcame the problem of misunderstanding by elaboration by the interviewee and clarification by the interviewer
58	An investigation into the causes of absenteeism and its impact on teaching and learning process	Completely: Children absent form lessons	Good: It was a researchable topic which prevailed at the school	Questionnaires and interviews because it gave the respondents enough time to express their views
68	Comparative study on the use of temporary versus permanent grouping in the teaching/learning of agric	For the most part: Pupils lacked motivation shown by poor performance in tests and examinations	Good: It was good because pupil's performance in tests when they are in each group is easy to follow. Tools for research were easy to use, and results could be generalized	Temporary grouping techniques

Table 5.5 (continued)

#	Most important thing you learned from doing CDS?	What did you learn about yourself as a teacher?	An epiphany	Theories developed
14	That pupils behave differently if well graded and involved in planning projects	I ought to involve pupils in choosing projects as well as giving them reward of good performance	2JC pupils i.e. form 1b did not steal carrots seriously when compared to form 3 i.e. control	Pupils need to have some of produces especially carrots to avoid theft
15	Group leaders generally cause failure of group members	Task leadership is recommended. But for a group leader he must be democratic, intelligent and popular	Members under task leaders were more responsible	Group members work well under a popular, intelligent and democratic member
37	Pupils should group themselves for easy control of the class and to maintain discipline	Grouping if done by the pupils the teacher should monitor them so that there is no labeling that takes place in the class	None	Grouping of pupils in a learning situation is best when done by the pupils themselves
56	Problem solving affecting the progress of school projects	How to find information from students and research techniques	I managed to discover that small issues such as not giving agric pupils incentives affected their perception of the subject	None
58	Administration of different methods to collect and present data and interaction with the population	Should be firm and discuss the problems affecting students to improve learning	None	N/A
68	Students can understand better if you apply varied grouping approach	I think I am a good teacher, however requires more practice to reflect on the method I learn at college	There was high competition on my students in temporary groups while varied performance was noted on permanency	That pupils need to continuously change group membership so that they can benefit from experiences others have. Thus pupils in temporary groups share ideas more than permanent groupings

Issue 3: Problem of Preparation and Support

Auther, Grace, Patience, and Tobias were basically on their own to figure out how to do the CDS research project. The preparation and support were minimal for BTTC students trying to do research for the first time. The preparation from the college is short, disconnected, and abstract. Once students were in the field, contact with their tutor was negligible. With little to no assistance while conducting research, students were left to their own devises. When seeking advice from tutors, some students reported "horror" stories that led to their frustration and discouragement. With the minimal support, some students were able to succeed and learn from the process, but many more remained confused and failed to see the connection between doing research and learning to teach.

Disconnected Preparation

Each Professional Studies (PS) lecturer introduced research and the CDS to their classes in their own ways. In early November 1999, Mr. Maseleka initiated Grace, Author, Patience, and Tobias's cohorts by discussing the scientific approach. He included terms such as: observations, variables, generalized statements, hypothesis, deductive reasoning, implications, and testing to describe a process he called "research." To illustrate his meaning of research, he included an example of a crying baby. An excerpt from the class discussion follows:

> Maseleka: Let's just follow that in a simple example of a child crying [on] first observation. When we see a child crying what do we do?

Female student: Check napkin for dampness.

Maseleka: You already have the hypothesis. State the hypothesis.

Female student: Babies cry when nappy is wet.

Maseleka: That's a conclusion.

Male student: Maybe the nappy is wet.

Maseleka: The implication is that the nappy is wet. How do you solve the problem?

Male student: Check the nappy.

Maseleka: What is checking the nappy?

Students: (not audible)

Maseleka: That is the experiment. Okay, you find the nappy is wet, what do you do?

Male student: (not audible)

Maseleka: Let's write the implication, some babies stop crying when their nappy is changed. So you do the experiment, and you change the nappy and the baby stopped crying. So what is that?

Students: (not audible)

Maseleka: No, that's your empirical data. So what is your conclusion?

Female student: In conclusion, you could say the child was crying due to a wet napkin.

Male student: You could conclude maybe the baby was crying.

Maseleka: We have any new information?

Male student: Maybe babies stop crying when change nappy.

Maseleka: How do you know it has to be wet? Maybe the experience of changing nappy - being naked stops. So you need a control study to narrow the doubt that it was the dampness of the nappies. Because the scientific approach systematically describes or measures reality in

an objective way, it is a better source of knowledge than any other source that we have come across so far. Do you agree?

Students: Yes/no.

Maseleka: Now we open the floor to those who disagree or have a better approach.

Students: No response.

Almost three years after that discussion took place, I was working on a preliminary draft of this dissertation bouncing my month old baby, Tumelo, on my knee. Later, in the middle of that evening, trying to rock a crying Tumelo to sleep, he looked up to me, and I realized that Mr. Maseleka's scientific approach was lacking in dealing with the complexity of my situation. Being a father meant something far greater to this relationship than could be measured by getting a baby to stop crying (not that it was an easy trick.) Like being a teacher – it also requires looking into the complexities of many nuances of a classroom with grown-up minds.

Karr and Kemis (1986, Becoming Critical: Education, Knowledge and Action Research, Philadelphia: The Falmer Press) argue that educational research cannot run away from the demands of a scientific enquiry. However, they point out that such a positivistic approach neglects to examine deeper issues related to contexts, understandings, frameworks, and alternatives. (They suggest building from scientific inquiry and interpretive approach to create a critical educational research that is participatory and collaborative in attempts to create "research in and for education" pg. 156.)

While working at my computer, I was able to get Tumelo to stop crying by bouncing him on my knee or by putting a pacifier in his mouth. However, when he looked up at me as I talked to him later that night, I realized that there was much more to human relations than can be measured by single variables as crying or not crying.

Having a set of procedures to follow to test hypotheses of what is happening to specific variables was initiating students into a view of research that is contradictory to the action research approach described in chapter three. In the two subsequent lessons on research, Mr. Maseleka continued with research terminology such as: population, Sampling Techniques, validity, and reliability. He also discussed data collection tools of: questionnaire, interview, observation, and documentation. Some he just mentioned by name and others he discussed in more detail. In explaining interviews – structured and unstructured – he pointed out that the interviewer should avoid complex questions, use straight-forward language, specify what form of response is wanted, allow sufficient time for a response, avoid suggesting answers, not show signs of surprise, and carefully listen to the interviewees. While, Mr. Maseleka told his students worthwhile information about conducting interviews, there was no discussion or practice involved. Overall, his approach lacked in preparing students to examine and reflect on the complexities of a classroom in a systematic manner.

Poor Preparation

In questionnaire after questionnaire students claimed that the preparation they received was inadequate to conduct a research project. One PADE student

completing his/her CDS in 2000 wrote, "If we had been taught thoroughly before going on TP on how each and every step is done. As it is lecturers just browsed through without an example at all." Another gave the following comment, "Students should be assisted up to chapter 3 and 4 [before] going for TP. Lecturers should say what is expected – not to ignore students when they need assistance." When asked about assistance received in the same September 2000 questionnaire, thirty-one out of the thirty-eight responses discuss how preparation and assistance were lacking in general or in specific areas, e.g. the "writing of background and methodology." On the September 2001 questionnaire to all vocational/technical and PADE students who completed TP, twenty-seven (12.8%) wrote comments about the lack of preparation when given the space to write about "anything else not addressed" on the questionnaire. Comments included, "CDS project should be simple, i.e. language used at times difficult to understand" or "We should be taught in general how to collect data and analyze it before going for TP." Very close to the same percentage of academic students (12.3% or 19) gave similar responses on their May 2002 questionnaire, e.g. "There is need to adequately prepare students for research since this will be the 1st experience. Lecturers/ tutors who are really conversant with research should teach students with more depth than is being done" and "Before going for TP, great assistance should be given to students so that when they leave the place for TP they know what they are doing."

Most students did not have a clear idea of what was expected from them in doing the CDS. While they may have been taught some of the technicalities of

doing research, such as terms of hypothesis, assumptions, and variables, they were not prepared in a way to understand the whole process. In my and Mr. Machera's (the LIC of PS) visits to subject area sections (academic – May 2002 and vocation/technical – October 2001), we discovered that most lecturers were aware of the lack of preparation students were receiving. The issue often started to become a "blame game" where subject area lecturers questioned the role of PS in coordinating the preparation. Luckily, the PS LIC was well adept at diffusing the situation.

Our visit to the Science section on 29 May 2002 was typical. When the issue of preparation came up, a lecturer stated that it was not clear how much PS does in preparing student in research methods. Mr. Mazanhi, an experienced PS lecturer, was there, and he explained the role of PS in introducing and sensitizing students to the basics of research. Then he pointed out that the subject area tutor was to go in-depth on the specific work of developing a particular topic and a research plan with the student. Like in most sections, the science lecturers then declared a need for a workshop where further collaboration could create common expectations throughout the college. Every section did argue the need for better coordination and collaboration, including a workshop. The consensus was that all lecturers should participate, not just representatives from each section – as was done in the first workshop.

In the sectional meetings, lecturers quickly focused on the core issues. They were sensitive to the reality that students experience two unknowns during TP – learning to teach and doing research. There was consensus that the two

should be integrated on many levels – not just students using the research process to reflect on and improve their practice but also in the way lecturers prepare and support student-teachers. During the Vocational/Technical and PADE section visits, four sections (Technical Graphics, PADE, Hotel and Catering, and Clothing and Textiles) stressed the value of fostering students' interest in doing the CDS project. The belief was that if students saw the value in finding a solution (and learning from the process), they would appreciate the research process. It was discussed that many students viewed research as a drawn-out list of procedures to follow to complete an assignment and not an integral part of teaching: As a member of the Technical Graphics section stated, "Research methods are not being properly handled...bits and pieces are taught here and there." Lecturers in the Building Technology section pointed out the focus should not be on teaching specific methods, but rather helping students determine which data collection method is most appropriate for their situations. The academic sections concurred with these sentiments. Geography lecturers, like many others, stated that better assistance was needed for students to understand what they are doing and why, otherwise they go through the motions without thinking or knowing why.

Some section lecturers reported being more involved in the preparation than others. A lecturer from the English section suggested that PS take complete responsibility in handling the CDS and leave the subject area completely uninvolved. Mr. Machera argued that doing so would be a big step backward, and the lecturer did not pursue the idea. On the other hand, Wood

Technology lecturers claimed to have given an intensive preparation program, including lectures on each chapter, providing handouts, and guidance regarding how to go about doing research.

Support – A Mixed Bag

Like most of the other student teachers, Auther et al. were visited by supervisors twice during their TP. Auther was disappointed with the first visit and pleased with the second mostly because of the scores he received on his evaluation. He, like the others, did not discuss their CDS project with their TP supervisors. They did not know when the visits would occur or by whom. Concerns of TP supervision were addressed in another study (see Weiler, Gadzirayi, and Mkondo, "Teaching Practice Supervision: A Need for a New Model." *The Zimbabwe Bulletin of Teacher Education*. University of Zimbabwe, Department of Teacher Education. Vol. 11. No.2. September 2002. pp 53-65.) Other than initial conversations with their school-based mentor teachers, there was no evidence that the mentors were involved in the research of any of the four student teachers. When visiting schools in and around Harare, more often than not, I discovered that the mentor was unaware that the student had a research requirement during TP. Very few had even heard of the term "CDS" when asked about students' progress.

While Auther, et al. received some support from my visits; I also maintained contact with their college tutors. Grace, Auther, and Tobias had Mr. Gadzirayi, one of the leading voices for promoting action research at BTTC and a well-respected lecturer. Other students were not so lucky to have a tutor as

competent. Once they began TP, students reported a wide variance of experiences in terms of support. Some gave their tutor credit for helping them along the way to gain a deeper understanding of the research process, and others related horror stories.

First the positive: when asked to describe the best aspect of CDS supervision, Vocational/technical students wrote:

> Coming up with the research topic
> It helps me to understand my CDS well
> Setting up questionnaires and general guidance
> Data analysis – formulating of the tables
> When tutor discusses and points out aspects that you don't think about

Even though there was much variance with the responses, on average, the students rated the assistance they received as "satisfactory."

On the same question, academic students gave similar responses.

> The tutor used to clarify most parts of the CDS that were confusing
> Whenever I make mistakes, I am corrected and given hints on what to write
> Good and clear explanations given on mistakes done
> Personal or face-to-face discussions with my tutor
> The marking did not take long. People are supportive
> My mentor was very cooperative and ready to assist whenever I had problems

Also, thirty-eight academic students (24%) did not indicate any "worst" aspect of assistance. In general, students indicated that they appreciated assistance in terms of discussions that clarified and gave direction. They wanted a tutor that was supportive and available. Of course, lecturers generally believed that they were fulfilling their role. On a December 1999 questionnaire, lecturers identified their role to include: supervision, guidance, mentoring, and facilitating.

Eighty-two percent of the respondents declared that they were able to fulfill their role in assisting students do the CDS project.

The "Horror Stories"

Some of twenty-five students I worked with during their 2001 TP experienced extreme frustration trying to get their topics approved. Six students had their topics rejected by their tutors after they had begun doing the research. In one case, Makwacha began her TP with the topic of "learning aids." Through discussions, she identified a problem of pupils not being able to do mathematical calculations in agriculture. She also mentioned that the department was to receive one hundred chicks that the pupils were responsible to care for. She believed that it was important for pupils to see farming as a business that needs to be managed. In the end, Makwacha decided to change her CDS topic to "Using a farming business proposal to improve mathematics in agriculture." The students were to calculate the costing, projected expenses. revenues, and profits for breeding one hundred broilers. Thinking that her topic was greatly improved, I encouraged her to begin collecting data. When I visited her towards the end of the term, she informed me that her tutor rejected the topic. She was unable to explain why. The new, approved topic was "Attaching deviance with responsibility to teach in improving pupils' performance in practicals." Makwacha kept a positive attitude throughout the experience and claimed that the experience was "an eye-opener." She previously thought that punishment was the only way, but then she realized that pupils carry those negative labels with them. Nyirenda was unable to maintain such a positive attitude. Her tutor

rejected her topic four times before she refused to change it again. Unfortunately, she had only a few weeks to complete the project.

In a questionnaire with the same twenty-five students, most students (20) claimed there was a need for more assistance from their supervisor. Some asked for general support, e.g. "To be guided on how to tackle the problem and how to go about the CDS." Others were more specific about the aid they desired, e.g. "Clear explanation on the instruments to collect data."

When asked what was the worst aspect of the assistance received, vocational/technical and PADE students (September 2001) wrote comments such as:

> Being told that "you have done nothing"
> Initially being forced to change topics by tutor
> Being told to go and rewrite whilst what I have written has not been marked
> There was confusion on the aspect of hypothesis, assumptions, and sub problems

The academic students were more critical of the assistance they received. Their questionnaire responses (May 2002) included:

> Supervisor should not write CDS for students in the form of corrections but should direct them adequately so that they conduct the study with little or no supervision
> The lecturer said that it is not his duty to help me. His duty is to mark and sign
> Tutor did not discuss anything about the CDS – only said go and write the final one
> Tutor telling you the draft is not well written and not guiding on how to do it correct
> Unfair discussions – tutor is sort of a dictator – tells you what to do but you can't argue
> Being made to change the topic by a second tutor when the first had approved "my" topic

Twenty-eight students did not indicate any "best" aspect of assistance, or the gave comments such as, "None. My supervisor is too busy to attend to my problems."

When asked if there were any other issues not discussed, fifty-one (24.2%) of vocational/technical and sixty (38.7%) of academic students wrote about lack of supervision. Many were pleading for more support and less confrontation. Statements include:

> Lecturers/tutors should put more effort in helping students but not dictate what to be written as in some cases.
> Supervisors should learn to have a soft hand when advising students. Let them be patient.
> Tutors should not make students write what they want as this would no longer my CDS but our CDS. Give students room to make their initiative.
> All lecturers should be well versed in the CDS everyone has their own interpretation and the student ends up being confused.
> Some of the tutors are lazy. They keep on postponing times to meet until you lose hope.
> Some of our tutors are not available for consultation and damper our zeal by constant change of topics approved by them.
> Some tutors are too strict that students re-write their work more than 5 times which is very demoralizing.
> Students cannot help each other since the departments do not have agreed way of writing the CDS. The lecturers differ greatly on their policy.

In general, students reported that the supervision they received was a) minimal, b) inconsistent, c) misguided, or d) de-motivating. While students were seeking support and guidance, they did not want to lose control of the process. Many students indicated that they simply wanted clear expectations so they would know what they were supposed to do. Students never indicated that they wanted an easy way out of doing the work, but they were very clear that they needed help in completing the research project. Several comments suggest that

the supervision was an impediment to the students' progress rather than a support.

A recurring theme was related to power and control of the research process. At times it was ambiguous where the locus of control resided. Was the CDS the students' project with the role of the tutor being to assist and support? Were tutors justified in taking more control to make sure students stayed on track with the process? Some tutors argued that students were not willing to take responsibility for their own project. An example was when a Wood Technology lecturer stated that students were demanding step-by-step guidance with the tutor telling them exactly what to do throughout the process with the result of the students never taking initiative.

An agricultural lecturer took the students' point of view when he explained why some tutors changed students' topics and dictated approaches. He gave the following reasons: 1) some tutors think that the people from the University of Zimbabwe (who conduct external assessment of BTTC programs) are looking for a certain type of topics/research that is more "academic", 2) some tutors have never engaged in action research and their comfort zone with what students do is limited, and 3) some tutors do not have a conceptual understanding of the research and end up mystifying the process to cover-up their lack of knowledge.

Through discussions with lecturers in their sections, PS lecturers articulated the ideal tutor-student relationship. They pointed out that the research project belongs to the student, thus s/he should take responsibility and initiative to complete it. They should be able to justify or explain why they are

choosing their topic, using a particular method of data collection, or why they are presenting the information in the form they choose. If they give reasons that are logical, then the student should proceed. The tutor is free to make recommendations with the understanding that there are many ways to do any aspect of research.

The Computer Studies section claimed to take a more "adult approach" to supervision. The only deadline they gave their students was for the final product. The lecturers tried to keep students focused on trying to improve some aspect of teaching, rather than proving something already known. When their students had problems, the lecturers were accessible (including weekends and holidays), and they discussed a way forward. Most of the students were deployed in and around Harare, which made it more convenient for them to consult with their tutors at the college.

Unfortunately, most students did not have access to their tutors during TP. Teaching Practice supervision was not organized in a way that CDS tutors visited their students in the field. TP supervisors were drawn from a pool of all lecturers at the college, and usually one lecturer/supervisor observed all students in a particular school. Lecturers have commented that they were hesitant to remark on CDS topics and research activities of students who they were not supervising or who were not in their subject area section. They argued that they did not want to undermine the direction being given by the student's tutor.

Again, this problem was indicative of students not "owning" the research process, and allowing tutors and other lecturers to have control of the process.

The Technical Graphic lecturers suggested that TP supervisors should assist students by helping them think through their research, i.e. asking questions rather than giving answers, or giving specific assistance in an aspect of research methods, e.g. helping with the wording in a questionnaire. Another suggestion came from other sections and Mr. Monde, Head of the Vocational/Technical Department. They wanted to see members of each section do the first round of supervision visits for their students as opposed to the random approach in existence, where any supervisor could see any student.

Relationship Between Overall Experience and Assistance

As mentioned previously, there was a direct relationship between the students claiming to have a positive or negative experience and their understanding of the research process. Overall experience had an even stronger relationship to the assistances students claimed to have received. On questionnaires administered to vocational/technical and PADE students (September 2001) and academic students (May 2002), four students (1.9%) and seven (3.3%) respectively rated their "overall CDS experience" as low as possible on the scale indicating it was "Terrible/a mistake." All but one related their experience in one way or another to supervision. Comments included:

> No assistance as lecturers proved incompetent.
> Topic was changed at college, but I found it suitable while I was on TP.
> Impractical and fictitious because the students are not adequately prepared and the time is too short for the conducting of realistic research and drawing conclusions.
> It's too laborious especially with little assistance and with supervisors imposing their minds on you.

Of the twenty-eight (13.3%) of the vocational/technical and PADE and twenty-three (15.3%) academic students who rated their overall experience as "not good", over half focused on inadequate assistance.

> I had the zeal to do my research thoroughly but the supervisor kept on delaying, postponing appointments.
> My tutor was less cooperative than expected. He pushes you around and at the end I got confused.
> It's a matter of following instructions without being independent especially if a tutor instructs me to change my own topic and take his/her – the thing is not mine then.
> Because I was twisted and tossed from one tutor to the other. I had discovered a real classroom problem but was forced to change.

Students who did not discuss assistance directly wrote about not understanding the research process or not having enough time to do the work.

More students indicated that their experience was "satisfactory" than any other category – (65 or 40.1% of vocational/technical and PADE and 65 or 43.3% of academic students.) Most of these students considered factors other than supervision when evaluating their experience. However, twenty-six did continue to focus on a lack of assistance and gave comments such as: "It is fairly difficult if assistance rendered isn't adequate but it is interesting" and "Students at this college are sent out on teaching practice before they have adequate knowledge of how to conduct research." Conversely, five vocational/technical and PADE students gave comments that they found assistance available.

When it came to those students who reported to have a "good" or "Fantastic/best possible" overall experience, they focused less on the supervision they received. The few (Eight or 10% of vocational/technical and PADE and zero academic) students that did attribute their positive experience to assistance given

by tutors wrote comments such as: "I got more assistance from the supervisor and mentor" and "The lectures on CDS were quite good and enough to prepare me to face the challenge." It appeared that students were more apt to blame lecturers for negative experiences than they were to give them credit for positive ones.

Some students and lecturers have identified the problem of support stemming from tutors' inexperience with doing research. One Mathematics lecturer stated, "Out of ninety-six lecturers, sixty are not well versed in research." Several students' comments have pointed to their perceived incompetence of lecturers. In general, lecturers showed much interest in ways to improve their understandings of the research process. After the first CDS workshop (June 2000), 45% of the participants indicated that they were "very interested" and an additional 35% were "so interested [that they were] willing to help organize" additional workshops related to the CDS and research. This indicated that several lecturers were not satisfied with their level of expertise in supervising research.

CDS Guide – Figure It Out on Your Own

Nearly every lecturer and most students were generally positive about the CDS guide being produced and available. While the compliments were gratifying, some complex issues developed. The guide did create a common language, which a lecturer from the Hotel and Catering Section recognized as "providing a common ground for lecturers of different sections to dialogue about the CDS and research." On the other hand, some lecturers used the guide to

neglect their responsibility to advise students. On the September 2000 questionnaire, a PADE student wrote, "Please explain how this CDS is done in detail and approve topics before pupils leave for TP, not just giving study guides."

In the first year it was available (2000), 40% of PADE students (Auther, et al.'s cohort) indicated they used most or the entire guide. Only one student (3%) wrote s/he didn't use it at all. When asked what information was missing, just over half (21 out of 40) did not write anything or wrote "nothing". Of those that did identify something, just over half (11 out of 19) wanted more detail on analysis of data, the point where most of them were in the research process when they completed the questionnaire. The following year (2001) in the questionnaire conducted with 25 students engaged in TP in and around Harare, ten (40%) claimed to have used the entire guide, and another three claimed to have used most of it. Again, only one student declared not to have used the guide at all.

Lecturers have indicated a larger variance in their use of the guides. In our visits to subject area sections, we discovered that some sections, like Computer Studies, viewed themselves as an experimental group and felt compelled to use the guide to assess its effectiveness. In other sections, some lecturers had not even seen the guide. Each department purchased so many guides and distributed them to the lecturers in charge (LIC). In some cases, not enough guides were bought or the LIC did not make them available to section lecturers.

In our visits to subject area sections, most lecturers showed appreciation in having a standardize approach to the research process. The majority mentioned the value of being able to discuss research and CDS issues across sections. In the past, sections had disagreements about who was responsible for submitting the marks (scores) for the completed projects, and issues of the substance of the projects were neglected on the college level. With the guide, sections continue to have authority to make their own policies, however there was a standard from where they could diverge.

Some students and lecturers questioned how much the CDS guide actually provided guidance for students doing their project. A Geography lecturer mentioned a discussion she had with a student. They "made reference to the guide but couldn't find guidance." Some lecturers indicated that students would not have been able to come up with a research project using the guide because the guide used a more general approach, and it did not lead students through the research. The guide offered a general understanding of research and the CDS, but the specifics were left for individual sections to address. In many cases, section lecturers complained that there were not enough details for particular procedures they wished to highlight. For example, Technical Graphics lecturers wanted more attention on the construction of questionnaires. At the same time, Building Technology and Clothing and Textiles lecturers argued that there was already too much emphasis on questionnaires.

Others have argued that the guide was too complex. Lecturers in the Mathematics section claimed that it was confusing to students, and they believed

that there was a need for more practical examples. Some students also gave similar statements. One came from a May 2002 questionnaire of academic students: "In the CDS guide chapter 4 [Data Presentation, Analysis, and Interpretation] was not clearly stated. It should have been clearly stated for us to understand it better."

Ideally, the guide would have been used as a lecturer from Building Technology argued; "Lecturers and students should go beyond it [the CDS guide] and not follow it sheepishly." In a proposed second edition of the guide, the PS section advocated for more examples and models from various sections. However, no guide would be able to do everything – give clear understanding of how to do research but not be overly directive, or being relevant for students in each subject area while allowing sections the flexibility to develop different expectations.

Way Forward

Coming up with solutions to the problems of support was not difficult – implementing those solutions was the challenge. There was general consensus that better assistance was needed for students to understand what they were expected to do and why they were doing it. Otherwise, students would continue to go through the motions of doing the CDS without it affecting how they reflect on and improve their teaching. Lecturers have made suggestions to improve the preparation and supervision, however few have been implemented. The following issues have been discussed throughout the college:

- Re-organizing the time frame of completing the report

- Developing tools of accountability
- Rethinking TP supervision to include the CDS with the deployment of tutors to observe students
- Collaborating and coordinating subject area sections with PS to introduce the CDS
- Promoting more dialogue between tutor and student

Most of the ideas were thoughtful and would have improved the CDS. For example, lecturers from several sections (Geography, Computer Studies, Hotel and Catering, and Building Technology) proposed having students do structured, field observations prior to TP. The thought was that students needed to experience a classroom situation to identify real problems. Students would have been given specific assignments during the observations, e.g. interview the teacher on a particular problem and make observations of how the problem manifests itself in the classroom. Also, many section lecturers have advocated that PS identify a link person to work with the particular subject area lecturers to coordinate timing, terminology, and approaches of preparing students to do research. Unfortunately, these suggestions remained in their infancy and had not developed during my time at BTTC.

One attempt to address some of the above issues was the creation of the Dialogue Report on CDS Progress form below. The form was born out of a series of CDS workshops (January-February 2002) for all vocational/technical and PADE lecturers. As the title of the form suggests, the intention was to promote dialogue between the tutor and the student. In the second term of 2002, the form was introduced with moderate success. Unfortunately, instead of

dialogue developing, in most of the preliminary cases, the forms were returned to tutors indicating that the students had not developed a topic and thus had not begun doing the research. Evaluating the effects of the form will need to be done on continual bases.

The success of the report form or any of the other proposed changes to improve the preparation and support of the CDS depends on the will of lecturers/tutors throughout the college. Unless the PS Section organizes workshops and section visits, the commitment of implementing the reforms is dependent on the interest of particular individuals, which is not enough to institute change. Under Josh Chandauka, the first CDS workshop for representatives of all subject areas was conducted in January 2000. And subsequent workshops (January-February 2002 and May 2003) took place under the leadership of Isaac Machera. All workshops were considered a success, not as much for accomplishing great feats, but for paving a way for greater communication and collaboration. When asked what was the best thing to come out of the first workshop, twenty-six comments included issues of: collaboration, dialogue, cooperation, collective responsibility, agreement on a way forward, partnership of CDS as a college thing and not a PS thing. For example one lecturer wrote, "Spirit to speak up and dialogue issues." Creating something tangible should not be regarded as unimportant. Sixteen lecturer's responses showed value for producing the CDS guide, marking scheme, interrogatives to give guidance for particular chapters, and a supervision check list. Nine other

comments related to gaining a greater understanding of aspects of research and/or the CDS.

Most of the unresolved concerns from the workshop includes: developing ways to standardize supervision (7 comments), giving lecturers more support in research methods (6), dealing with negative attitudes and behaviors of some lecturers (6), implementing the decisions made (6), coordinating with PS members (5), and maintaining dialogue (3). As (will be) discussed in the following chapter, the dialogue and commitment that was promoted through the workshops were the key ingredients in making the reforms of the CDS effective. The intention was not to find the answers to all the problems, but to involve more lecturers in the deep thinking necessary, to share ideas of ways forward, and to work together to make improvements.

With a collaborative spirit, lecturers would be able to build ideas and actions from each other and create ways of supporting and challenging students to do meaningful research. Otherwise, lecturers would grope in the dark asking, "What is this animal call the 'CDS'?" In turn, the assistance they give their students would be inconsistent, unclear, and dependent on the knowledge of each individual tutor. And in the end, the student too would grope in the dark trying to figure out "this animal called the CDS." A few, like Grace, did not need assistance from their tutors. But many, many more did need better preparation and support in their first attempt; trying to figure it out on their own did not lead to meaningful experiences for them.

Conclusion

The dialogue revolving around the CDS was in the process of developing. The dialogue on the micro level, i.e. the individual student, influenced the dialogue on the larger level, i.e. at the college. Examining the realities of the students leads to a deeper understanding of what this dialogue means for their conducting research. Tobias, Patience, Auther, and Grace show how this dialogue played out for individual students and their research. The three issues of the day – the process of picking a topic, conceptualization of research, and the preparation and supports – have different meanings for the different students. Auther was the only student who willingly and eagerly engaged in the dialogue process. By sharing field notes and discussing various phases of his research, he was able to develop a deeper understanding of the research process. Grace, who was pre-equipped to tackle a large research project, might not have needed to engage in dialogue as much as Tobais, who showed no progression in his thinking about research, to be able to complete the project. Patience showed how some students engaged in a dialogue without doing the actual research. Instead of developing praxis where her theory was reflected in her practice, she developed a rhetoric that was just enough to pass.

These four students had different experiences in participating in the dialogue. However, their experiences shaped the dialogue. As discussed in the second chapter, a dialogue is strengthened when the participants come from different perspectives. In the next chapter, I will examine the lecturers' role in this dialogue.

While students and lecturers come from different perspectives, within each group there was much variance. There is evidence that some students found the project as a deeply reflective and rewarding process, while others found it frustrating and a waste of time. Different experiences and expectations add complexity into the dialogue regarding what the CDS is, what is should be, and how it should be improved.

As discussed in the third chapter, action research primarily represents liberation ideology. While the students engaged in action research type of CDS project, few of their conversations explicitly reflected a liberation ideology perspective. There were elements of "reflection and action" in Grace's practice. By deeply examining the issue of pupils doing corrections, she was able to address issues of language in her class. She developed ideas about pupils not understanding the question as an obstacle to demonstrating what they know. Auther also engaged in constructivist thinking as he pointed out the importance of being "open" in developing new ideas to solve problems. His focus of pupil-ownership of the gardens and what they grew was also an element of liberation pedagogy, i.e. challenging traditional views of workers' role in production. In general, the other two focus students' projects primarily reflected a free market perspective. Patience's pupils' "Dream plans" focused on preparing good entrepreneurs, and Tobias used a technical, functional approach of finding the more efficient teaching aid between charts and models.

None of the focus students addressed the political issues immersed in their projects. In a time of land reform through farm invasions, I did not observe

any student make explicit connections of these issues with their CDS project. Also there were no discussions regarding the hierarchal nature of knowledge and the classroom structure.

The elements of liberation ideology were more subtle. By listening to pupils, these students were challenging the traditional, hierarchal nature of a classroom where knowledge is one-way directed from the teacher to the student. Also, by developing their own ideas and ways to solve problems in the classroom, they were being protagonists in their classrooms.

The three major issues addressed also have liberation ideology implications. Most of the dialogue revolves around making research a more democratic process and less hierarchical and technical. The ideas of having students take more ownership of their research and lecturers providing support leads to a more constructivist view of knowledge. Students, with assistance, were developing their ideas of how to become an effective teacher. How this issue is negotiated at the college is discussed in more depth in the next chapter.

CHAPTER 6
Promoting the Dialogue

Posing the Questions

Assumption: The dialogue is to begin with the current perspectives and realities of the lecturers at the college. What is the tension between supporting a variance of perspectives and promoting some over others that are more conducive to a dialogue? What is the role of advocates from one perspective trying to convert those from another perspective? Are all perspectives equally legitimate as long as they have supporters?

Who else needs to be included to make the dialogue more meaningful in terms of promoting effective change? What should be the role of students, of university professors, of central administration, of politicians in this dialogue?

Introduction

External examiners representing the University of Zimbabwe's Department of Teacher Education came to Belvedere in November of 1999. When they presented their findings of the quality of the college's programs, one after another, they discussed the CDS. Nine of the fourteen external examiners related common problems in the various subject areas. The issues included areas of coordination, marking, and lack of quality.

The staff at BTTC did not need someone from the outside the college to come and tell them that there were problems with the CDS. There was consensus throughout the college that the CDS was not living up to its potential stated in *The Belvedere Technical Teachers' College: Applied Education Syllabus.* Rather than focusing on a particular problem in their classroom and trying to find possible solutions, year after year, many students compare "the lecture method" and "discussion method" only to come to the conclusion they had in mind prior to starting. Students, college lecturers, and school mentors have claimed to be unprepared to conduct and/or support an action research project.

"What is this animal called 'CDS'?" was a comment often heard by our research team during the first years of this study. In surveys (discussed in chapter five), college lecturers and students routinely indicated that conducting the action research project and developing personal theories were the areas least addressed during their teaching practice.

Promoting action research that develops critical thinking, problem-solving, and constructivist thinking is a challenge for any teacher education program. In Zimbabwe, that endeavor is complicated by a history of colonial imposition of a hierarchical education system that demanded compliance rather than questioning. Most of traditional teaching and research involves following a set of procedures in hopes of obtaining results. Because African teachers are often not viewed as professionals, many education reforms have been designed to "teacher-proof" the curriculum so the teacher passively follows instructions. Introduction to research is often taught in the same way with a list of procedures for researchers to follow. Progressive educational reforms focus on what Henry Giroux (1988) refers to as "Teachers as Professionals" where teachers are to be innovative problem-solvers in the classroom to make teaching and learning meaningful. Now, twenty-three years after Zimbabwe's independence, Belvedere Technical Teachers' College is making bold strides in rethinking teacher education.

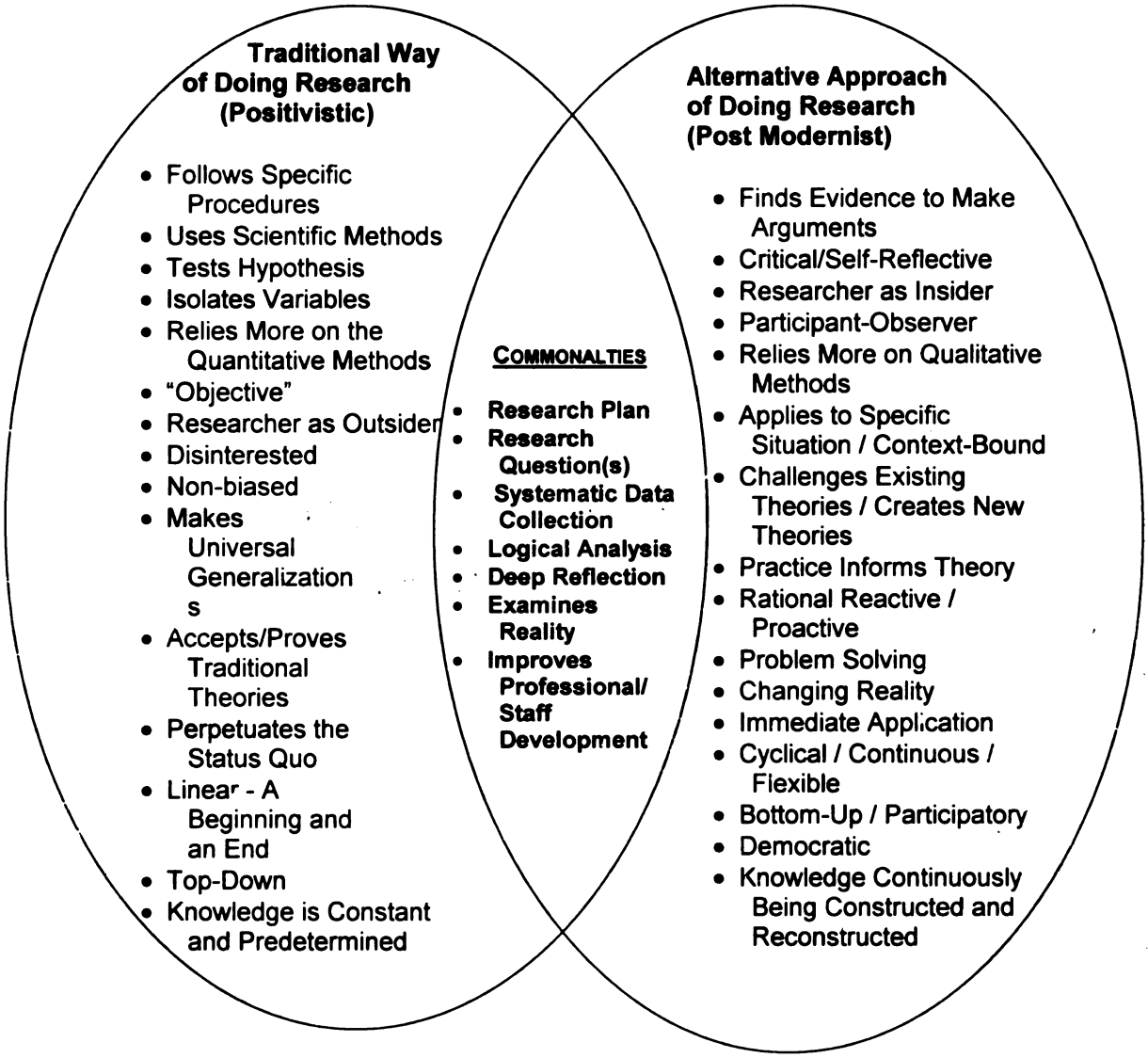
My research with the PS section did not lead to a neat set of conclusions where we can present answers regarding what teachers' colleges should do. This research was ongoing; it was a complex and ambiguous journey. By

attempting to model the research process we are professing for our students, we seek questions and deeper understandings rather than purporting answers. The PS section views research not as a means to a product (answers) but as a process to deeper understandings, increased dialogue, and more meaningful actions. In this chapter, I examine how the PS section promoted the CDS dialogue, how it was negotiated at the college level, and what this dialogue means in terms of promoting reform at BTTC.

The goal for the PS section was for all its lecturers to engage in a process of action research and to integrate it into the way it does business at BTTC; that is, to create a culture of inquiry, dialogue, self-reflection, and change. What follows is a description of how the PS lecturers (including myself) attempted to integrate our beliefs about research with how we prepare and support students to do their research. While I was responsible for most of the data collection in this process, other PS members were involved in other ways. Mr. J. Chandauka, the lecturer in charge (LIC) of PS, Mr. I. Machera, who later became the LIC of PS, Ms. I. Mkondo, and Mr. Mazanhi and I formed the core of a research team. Throughout my three and half years at BTTC, we met informally to discuss which issues we wanted to address and which data collection activities would be useful. After I had collected data from primarily questionnaires or interviews, I would present the findings to the group for analysis and discussion purposes. As a group we would decide which steps to take to address problems we faced, e.g. to visit other sections, meet with students, or have a workshop.

The PS section presented an alternative perspective in how college lecturers viewed research. Mr. C.T. Gadzirayi, an agriculture lecturer, and Mr. J. Chandauka, and I developed the chart below to show how we at BTTC are viewing the changes in how we conduct research. In creating this dichotomy of research approaches, our intention was to show that there was more than one way to view research. Most of the lecturers with university research experience followed a positivistic perspective. That approach was the model promoted for as long as many lecturers could remember. The alternative approach being offered was used to spark a dialogue regarding what is research, what should it do, what can it do, and what can it not do.

Figure 6.1 – Models of Approaches of Doing Research



While the PS section did not dismiss one approach for the other, we understood that the traditional quantitative approach was where most of the college lecturers were coming from and that action research is more linked to a progressive qualitative approach. "Being objective" was a concern for the more traditional lecturers to accept the action research approach of the CDS. John Elliot, an action research advocate, argues, "Quantitative methods, which are designed to produce aggregated data in depersonalized and decontextualized

form, appear to constitute the perfect solution to the 'insider researchers' dilemma. They generate public knowledge in a form which makes it impossible to use for the purpose of calling individual practitioners to account" (1991, pg. 64). We believed that it was more important that students got intensely involved in change than to remain unbiased.

While the PS section advocated a changing in thinking about research, we identified common ground in which all lecturers could agree upon what is good research. Our intention was not to convert all the lecturers to one particular way of thinking about research. Rather, by offering an alternative model, key issues could be addressed and gain consensus in promoting the commonalities. As discussed in chapter two, advocates of different perspectives are needed for a robust dialogue.

The PS section was following a liberation ideology perspective, and constructivist thinking was a primary element for us advocating action research. Constructivist thinking is a process whereby knowledge is viewed as being socially constructed. Phillips (1995) shows that, on many different levels, students can make sense of knowledge and analyze it to make new knowledge. In this view of schooling, students are encouraged to engage in higher-order thinking to use evidence from various texts to develop their own ideas and theories, rather than passively acquiring prescribed knowledge and skills. When students are active in analyzing and evaluating information for a clear and relevant purpose, not only are they able to comprehend and retain more, but they are more apt to use the knowledge in productive ways. Duckworth (1996), Meier

(1995), Dewey (1900), Freire (1970) and others describe strategies of constructivist thinking. Students develop "their own way" of working through problems where they develop the tools of looking at a problem in context, see themselves in relation to those realities, create ideas and theories for their understandings, as well as develop ideas to transform life circumstances.

Elliot (1991) describes how constructivist and critical thinking reflect the ideals of action research. In his perspective of education, teaching, learning, and research are all a part of the same process. The focus is uncovering deeper understandings and meanings in attempts to improve teaching and learning. This process of "praxology" integrates practice and theory to generate deep reflection so that one's actions and philosophies build on each other.

I believe that good teachers naturally engage in action research (perhaps informally) and constructivist thinking activities. Carlos Torres (1995) describes how action research is gaining interest and legitimacy worldwide as a strategy that combines action and reflection where teachers and others in the field examine their own practice, engage in the research process, and become change agents in their classrooms, schools, and systems. He argues that this research approach is increasing international momentum as a major contributor to improving education systems. However, in Zimbabwe, these teachers are most often a lone voice in the woods. Our goal is to create a BTTC community culture of inquiry, problem-solving, and democracy– the ideals of action research. Dialogue is essential for establishing this community.

In their book *Educational Action Research*, Noffke and Stevenson describe the importance of modeling action research in their classes. They suggest that by also being engaged in action research, the teacher educator is more prepared to share the complexities with the students. The argue against a prescriptive approach to teaching research, as they state, "We also have seen frequently the encouragement by teacher educators of recipe-driven and mechanical application of the steps in the action research spiral and a failure by teacher educators to make distinctions about the quality of work that is produced through teacher research" (pg 16). Like Noffke and Stevenson, we are using action research to help us better understand and find ways to improve students' research. In this chapter, I describe our approach to addressing the problem of the CDS project and the steps we implemented.

Conceptualizing the Research

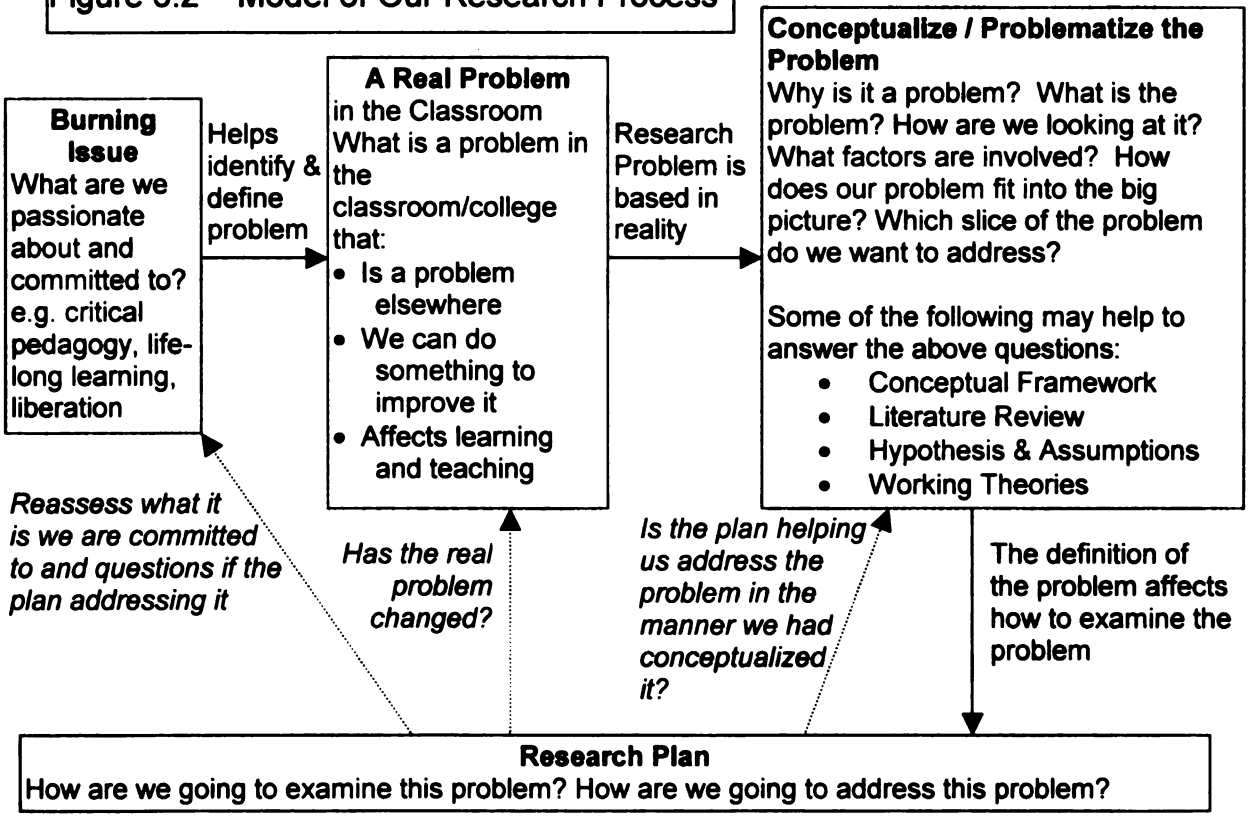
One of our concerns with students doing research was that they were trying to start in the middle of the process. For instance, they may have had a particular instrument they wished to use or have a strategy they wished to implement in the classroom. However, they often did not have a particular question or issue they wanted to address. And more importantly, they rarely ever identified a "burning issue[18]" that they were compelled to address.

The research process the PS section used was similar to model of topic selection presented in previous chapter. The idea was that lecturers should advocate a process that they use themselves. The process starts with a "burning

[18] The term "burning issue" was developed by Doug Campbell in Michigan State University Teacher Education course, TE 931, Fall 1997.

issue" or a passion of a particular concern, that is identifying what the PS lecturers really care about. The next step is to distinguish a real problem that is related to the burning issue. Then the following stage is understanding or conceptualizing the problem. At this point, we were prepared to develop a research plan of how we plan to find out more about the problem, what we can do to address it, and how we know what changes. The model below illustrates the process we used in addressing the CDS at BTTC. While the stages took on a linear form, there was much attention in reexamining our burning issue, real problem and conceptualization of the problem once we started working on the research plan. This reflection is indicated by the dotted lines in the model.

Figure 6.2 – Model of Our Research Process



The following sections describe our efforts at each stage of the process.

Burning Issue

As a section, the PS lecturers decided to spend much time reflecting about who we were and why we were interested in conducting research. If we were going to examine a college-wide issue, we believed that we needed to start by looking at ourselves as a section. In our discussions, we began by focusing on our burning issue. By agreeing upon what we were committed to, we could start to understand the issues we *wanted* to address, which issues we *could* address, and *how* we could address them.

The members of the PS section composed the following mission statement:

> To integrate educational theory, subject matter, and teaching methods to produce a reflective, innovative, and effective teacher engaged in life-long learning, personal growth, thereby maximizing teacher and student learning.

(See page 109 for a more visual description.)

The Problem

After looking inward at who we are and what we are about, we began to identify the problem. We already knew that there were real problems with the CDS project, but we needed to figure out what aspects of the CDS were problematic and why. To find out, we asked questions. Starting in January 2000, the LIC and I visited each subject area section to ask lecturers to share their views in a more personal manner. We discovered a concurrence of concerns; many sections voiced the same issues. Nearly all comments fit into three areas: supervision, coordination and standardization, and preparation

needed for good projects. The sections' comments are bulleted and follow each heading.

Supervision **(There is a lack of dialogue and structures of how to support and challenge students doing CDS during teaching practice (TP), and PS Lecturers should share in supervision.)**

- Need for training of CDS supervisors
- Need for guides for observations in the field
- Need to make students accountable during each stage of research process.
- Need to set the amount of contact time with students
- Want representatives of PS to supervise CDS projects

Coordination/Standardization **(There is a lack of a common understanding of what is expected with the CDS and a lack of accountability.)**

- Need to inform subject area lecturers how PS prepares students for CDS
- Need for better coordination between sections with preparing students and approving topics
- Need for uniform marking schemes among sections
- Need for PS lecturers to be more represented in subject area sections
- Need for more communication among sections
- Need for clear standards of expectations in terms of how CDS is organized and assessed

Preparation **(There is a lack of common vision in terms of how to prepare students to do good research.)**

- How should we view the project – big theories/ideas/discoveries versus specific classroom issues?
- How can students come up with better topics?
- When is the most appropriate time for students to choose topics?
- Need to clarify research terms (e.g.: hypothesis versus assumptions)
- Need to improve the quality of students' work in terms of originality, editing, presenting evidence, and making logical conclusions
- Need to work more with the returning third-year students in terms of the writing up the project
- Need for standardization in terms of referencing
- Need to have model projects
- Need to have a standard format for presentation of CDS (e.g., typed)

Other Issues

- Lecturers should engage in their own research
- How can working in groups be used in the project?

- Need for PS lecturers to fully occupy students [i.e., keep them meaningfully engaged] during scheduled lectures

We began to formulate a more clear understanding of the problems we hoped to address. We discovered that there was a lack of common expectations of the CDS. While the PS section viewed the project as a tool for reflective and constructivist thinking, many lecturers and students pointed out that such elements rarely addressed in doing the CDS. We also discovered that lecturers wanted more preparation in research skills, yet they were hesitant to admit a need for it.

A key issue was the communication between sections at the college. The CDS was a unique opportunity to cross boundaries at the college level. It was one of the few concrete, student assignments that spans across sections and departments. However in the past, some subject area sections were resentful about handing over the marks of students' projects to the Professional Studies section when the former group had supervised and evaluated the project.

The PS LIC, Mr. Chandauka put much energy in defusing the issue of students' marks. Other concerns emerged. The structures of accountability were fairly weak. In interviews, many subject area lecturers complained of not knowing how PS lecturers had prepared the students to conduct research and questioned the sections' involvement in the supervision of the projects.

Several sections indicated that a representative from PS should attend their section meetings, supervise a load of students doing their CDS, and become a de-facto member of that subject area section. PS lecturers, in turn, complained that subject area lecturers were not effectively preparing and

supervising for students to produce a quality action research project. Lecturers have identified inconsistency in marking across the section as another issue.

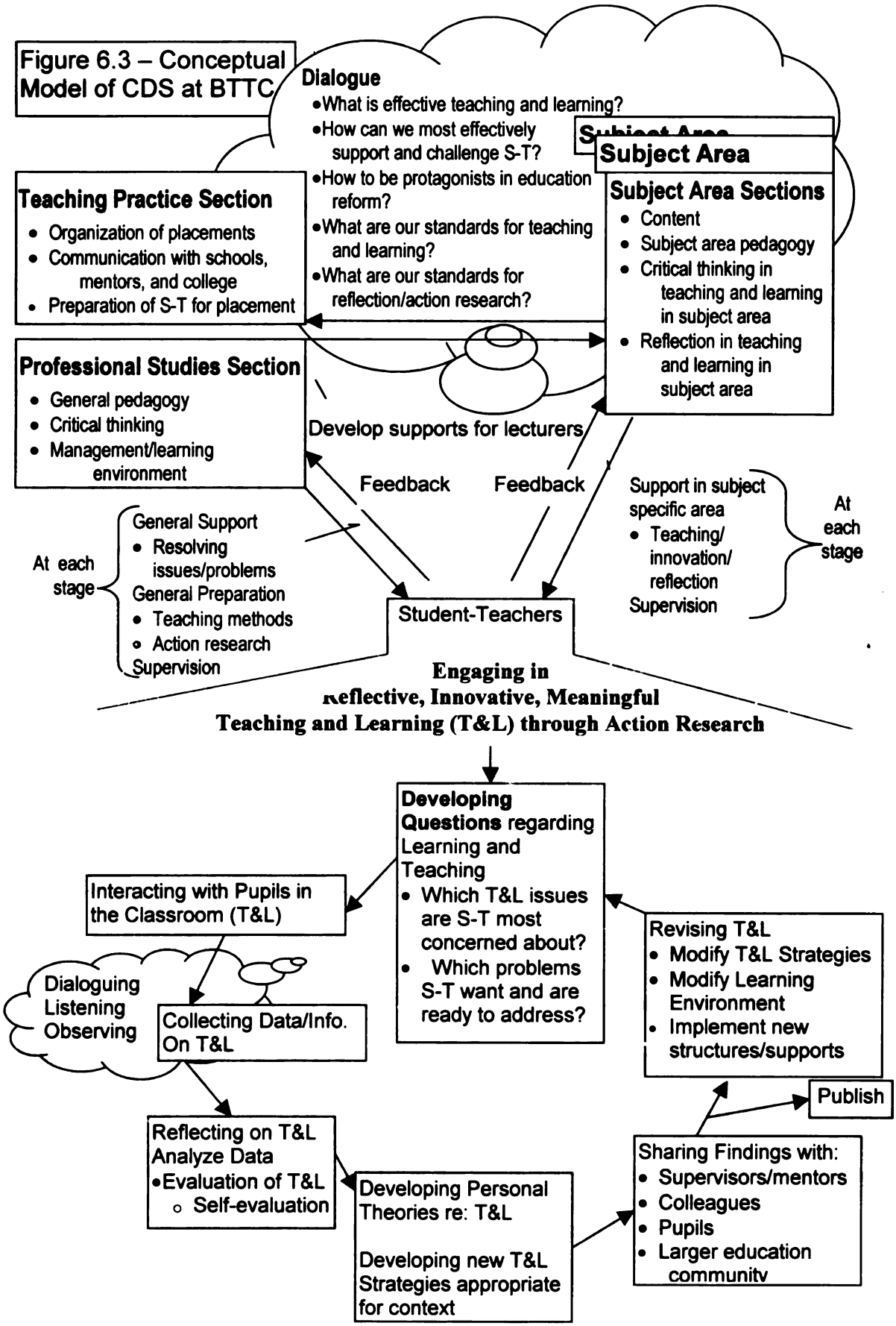
Conceptualize the Problem

The next step in our research process was to conceptualize the above problems in a way that shows how we see the various factors coming together. Paulo Freire (1970) describes the process of "problematizing" where one defines a problem in a way that s/he can address it. By using this process, we not only understand the problem in our own terms, we can identify possible areas we can influence.

We started our model with the three main stakeholders: the students, subject area sections, and the PS section. We wanted to show dialogical relationships. Thus, we began with the diagram with arrows going in both directions to each group to form the triangle on top. Teaching Practice (TP) section was included next to the PS section because both sections were responsible for the general preparation and support of all students conducting teaching practice. The dialogue between subject area sections and PS was to include expectations, standards, and ways of collaborating in supporting and challenging students doing their CDS. Arrows between sections and the students indicated the roles and responsibilities. While TP and PS were to focus on general preparation and support, each subject area section was to go in depth with the students who specialize in that particular content area. In this model, the students were supposed to offer responses in terms of comments, evaluations, and suggestions for lecturers in the various sections.

On the bottom was our view of the action research process where student-teachers continually ask questions; examine their classroom and their role in it; use evidence to create ideas of why certain things work well and others do not; share their ideas with others; reformulate their questions; and try to use the ideas they have learned. Once we put the key elements in the model, we were able to identify where relationships needed to improve. The model below shows how we saw the lecturers and the students relating to each other in terms of effective preparation and support of the CDS.

Figure 6.3 – Conceptual Model of CDS at BTTC



Of course, actions do not always follow the course prescribed by the model, but it is important to identify how we expected the parts to fit. Both the PS and the Subject Area Sections prepare and support students during the CDS project process, but their roles were slightly different. Because we had a common goal of preparing and supporting students, much dialogue needed to take place between the sections to make sure they reinforce what is learned, rather than giving students conflicting messages. If scaffolding – which involves students learning concepts and skills that continually build off each other (Collins et al., 1989) – was to be effective, much consensus and coordination was needed between sections. However, there were not many descriptors for the arrows returning from the students to the sections. This model identifies that weakness, and perhaps it will be an issue to be addressed at a later time.

We believed that we needed to make our thinking explicit in order to share a common language with lecturers from other sections and to invite them to join in the examining of problems related to the CDS. We hoped that this process would help us create a community of inquiry through developing a shared vision.

The Research Plan

We spent much time trying to figure out what the problem was and our relationship to it before we started making a research plan of concrete steps to take. However, I would like to reemphasize that this process was not completely linear. While we engaged in our research activities, we were also re-examining our conceptual thinking of the problem and our role in it.

Because we believe that action research should be ongoing, there were many parts to our plan. We tried to make reflection, dialogue, initiating new approaches, and more dialogue an integral part of PS standard business. In this section, I highlight two endeavors, the first CDS Workshop and the CDS Guide, which have helped us address the problems of the CDS.

The First CDS Workshop – Coming together

The first CDS Workshop (7-11 February 2000) was a significant step in furthering the dialogue on how to better prepare and support our students in doing their CDS project. As mentioned in the previous chapter, J. Chandauka (LIC), and other PS lecturers made a point to officially meet with each of the other BTTC sections. The intention was to sort out administrative concerns so the workshop could focus on more substantial pedagogical issues.

The meetings lasted for approximately two hours. Each section's LIC and any other available members attended. At times, the meetings would include two sections at the same time. Mr. Chandauka started each meeting explaining that he wanted to understand the concerns of the CDS by the section. From that point, each meeting's discussion depended on the views of the section members. Some meetings were more collegial than others. For example, when Mr. Chandauka and I visited the Science section on 17 January 2000. Ms. Nkala (LIC) and Ms. Dube (HOD) spoke the whole time and the other three lecturers did not say a word. It was not clear if there was a tension between them and Mr. Chandauka, who was also outspoken, but they complained about the PS section not taking on their responsibilities of communicating and collaborating with their

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section. They wanted PS lecturers to regularly come to Science section meetings to be abreast of what is going in the section and share what they are doing with science students. They also related dissatisfaction in the PS "doing nothing" and then getting the credit for presenting the marks of the CDS. Mr. Chandauka did not even attempt to respond to the accusations made. He took note and listened to what was being said.

Two days later, Mr. Chandauka and I met with a combined Building Studies and Technical Graphics sections. Lecturers shared their confusion over the differences between hypothesis and assumptions, and asked for clarification. They also discussed problems they and their students faced, such as typing the final report. Like the Science section, these sections indicated that there was a need for more communication between the PS section and theirs. However, they posed the issue as needing more uniformity throughout the college and a genuine interest in knowing what the students have learned about the CDS. The tone was less hostile. Rather than blaming the PS section, they showed appreciation to Mr. Chandauka for initiating the conversation.

Before the workshop even started, a tone was set. The process began with listening. While we all knew that the CDS was not meeting high standards, PS representatives were willing to hear what lecturers thought was wrong with the process. Rather than trying to defend PS in the sessions that seemed like a barrage of finger pointing and complaining, we tried to better understand the section. At the end of each meeting, there was a greater sense of friendship and willingness to work together to address problems of CDS.

The objectives, as stated in the workshop proposal, was to enable the participants to:

A) Have an understanding of the following questions
   1. What is CDS?
   2. What is Action Research?
   3. What is the relationship between CDS and Action Research?
   4. What are the respective roles of PS, Subject Area Sections, and Student in CDS?
   5. What is a good CDS project?

B) Identify the critical elements of CDS including:
   1. Topic formulation
   2. Project proposal
   3. Literature review/referencing
   4. Project design/methodologies
   5. Project presentation/report
   6. Project supervision
   7. Project evaluation

C) Develop a vision for each of the critical elements of CDS

D) Develop guidelines to enable students to achieve the envisaged vision for each of the critical elements of the CDS

E) Compile the guidelines into a module, the *CDS Guide for BTTC*.

A representative from each subject area section, all PS lecturers, and five additional organizers participated. The workshop was to take place on the college campus.

To promote a feeling of professionalism, Mr. Chandauka made a point to cordially invite each section to send their representatives to the CDS workshop. He also went to great lengths to have tea and lunch included in the workshop. While funders were more ready to finance outside consultants to lead sessions, we believed that we at the college needed to view ourselves as the experts of the workshop. We felt that by providing tea and lunch, we were treating the

participants as the valued professionals they are. More important than the convenience and enjoyment were the opportunities to continue discussions on a more informal and personal level; as a result, the lecturers shared insights and debated views between sessions.

The first day included Mr. Tom Bourdillon of University of Zimbabwe, Department of Education giving background information about the history and relationship of the CDS in teachers' colleges. He discussed the values of self-reflection, personal theorizing, collaborative action, action-oriented investigation, and a commitment to inquiry and self-improvement. Belvedere's Mr. C.T. Gadzirayi followed with a description of action research. Both presentations were focused on a paradigm shift towards promoting constructivist and critical thinking in teacher education.

Mr. Gadzirayi began with writing Shona proverbs on the chalkboard – "Kare haagari ari kare" (Things change – there is nothing static), "Kare aramba ari kare" (Sustaining traditions), and "Rume rimwe harikombi churu" (Unity is strength). He opened the discussion with asking, "What influences the way people teach?"

He suggested the need for college lecturers to change how they view research and presented the model of approaches to research – similar to the one presented at the beginning of this chapter. The two approaches were labeled "Traditional Way of Doing Research" and "Action Research." Mr. Gadzirayi suggested that action research was the alternative approach that the college should follow.

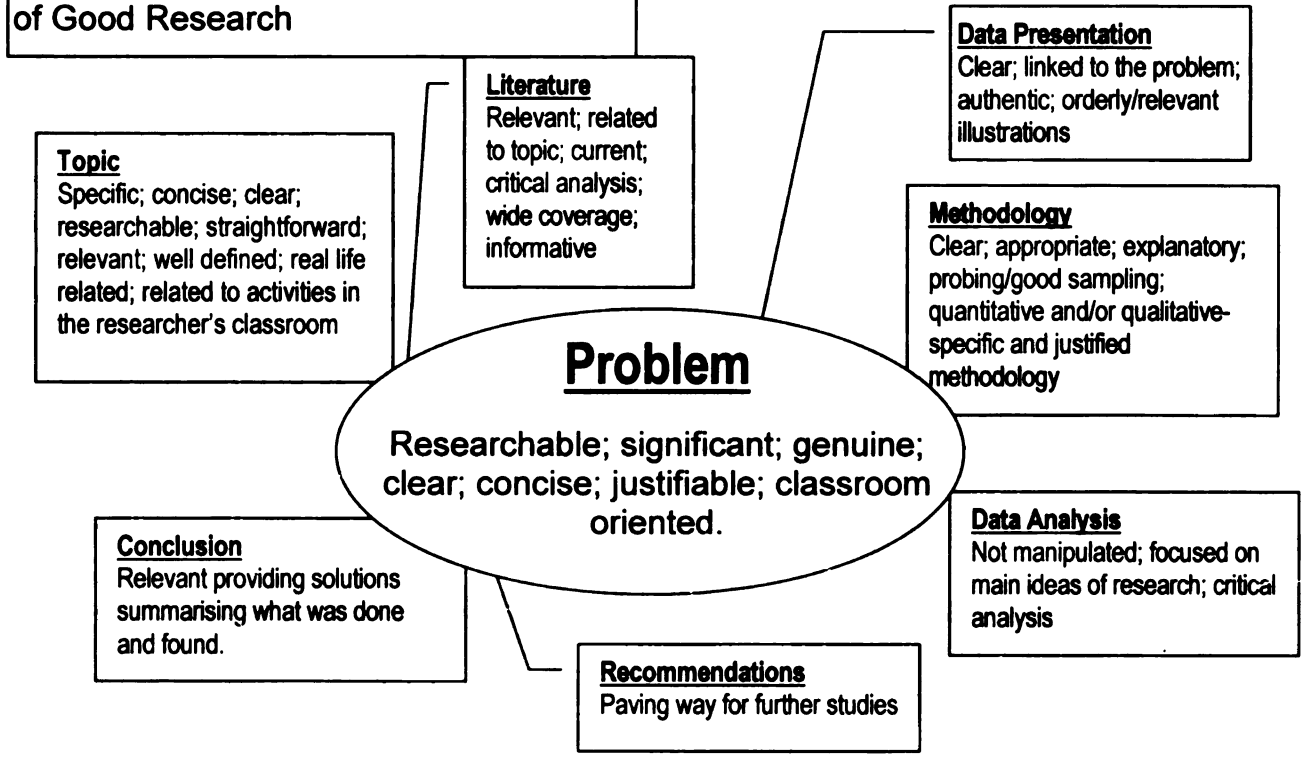
Even though the presentations were well received, tensions were beginning to arise. Action research was the only approach that was introduced. Some lecturers argued that the paradigm was being imposed on them, a contradiction to a democratic approach. They stated that they did not want to be limited to a single approach to research. During lunch the participants continued to discuss their apprehension about abandoning one way of doing research for another.

To circumvent the debate getting framed as "does the CDS have to be action research," in the afternoon we focused on building a common vision of "good research." Using a brainstorming method borrowed from Noel McGinn of Harvard Graduate School of Education, we had all the participants work in groups to identify various elements of good research. Each person in each group wrote as many elements of good research on a slip of paper. Ideas ranged from details of page numbering to issues of originality. Next, each group discussed the elements and categorized them. Then they organized the categories to show how the elements of good research relate to each other.

A transformation happened during that first day! The participants were willing to take on the role of expert. Rather than sitting passively while others told them how they should prepare students to do CDS, they reflected on their own experiences to identify aspects of good research and meaningful teaching. The professors from UZ, the only outsiders, were placed in groups and participated in the discussions as an equal member. Each group was immersed in dialogue regarding which elements contribute to good research and how those

elements are connected. The groups started to present their ideas in a linear format. However, when they were challenged to rethink how the aspects related to each other, they moved towards more a holistic approach of doing research. One group created the model below to show their thinking.

Figure 6.4 – Workshop Group's Concept of Good Research



Like most others, this group organized their thinking of research to revolve around a real problem. The above model and the others created were different than the ones PS section created. This was seen as a positive sign. The models presented earlier in this chapter (figures 6.2 and 6.3) focus more on how to conduct research and the ones presented at the workshop dealt with aspects of what makes good research. While these are similar issues, the workshop model (figure 6.4) demonstrated lecturers coming together to construct a common way of thinking. There had been a consensus that lecturers were tired of supervising

projects that compared one teaching method with another and that students should be challenged to think deeper about significant classroom issues. The models developed signaled a first step in rethinking how the college should approach the CDS.

In the remainder of the workshop, participants joined teams reflecting on critical elements identified the first day, which included: project proposal, literature review/referencing, design/methodology, presentation, supervision, and evaluation. The first task of the teams was to develop general overview and understanding of key aspects of their topic to share with the whole group. What were supposed to be twenty-minute presentations turned into two-to-three hour discussions leading to deeper understandings of what it means to do each element well.

All of the presentations came from BTTC lecturers. An air of respect for each other emerged. Ideas were presented and discussed in a way that promoted deep thinking. Those who had accused Mr. Chandauka and the PS section of not living up to their responsibilities did not attempt to detract from the discussions. They and others joined in the dialogue of how to improve the CDS. Lecturers listened attentively during the presentations and as soon as they concluded heated discussions would begin.

Ms. Thabete, a lecturer in the Science section, offered her group's insights on research methods. She presented a traditional, quantitative research approach of testing variables to see if there is a change. Her explanation was very clear and concise. Other participants were able to understand her approach

and in the end, they were ready to recognize her as an expert in setting up a quantitative research project.

Mr. Makore, another lecturer, thought his debriefing on his team's work on how the CDS project should be presentation would be straightforward. Instead, it led to the whole group building common definitions for research terms that had previously been used without clear understanding. Terms such as "hypothesis", "assumptions", "justification", "significance", and others had been thrown around in discussions but, until this point, it was not clear that lecturers were talking about the same things. At times a lecturer would offer a textbook definition of one of the terms. The participants were not willing to simply accept the definition on the authority that it was "official." Instead, lecturers dialogued and began to trust the understandings of research concepts that they were constructing together.

By the last day of the workshop, all the participants approved each team's draft of elements to be included in the *CDS Guide*. Being successful in building a community of inquiry did not mean that we resolved all tensions. Debates continued. Some of the issues were: how to balance the theoretical and the practical aspects of the CDS; how much to defer to university, external assessors' opinions of research; how binding should decisions made in the workshop be compared to the level of decision making in the individual sections; and how prescriptive should the process be for students. Different points of view added to the dialogue and, in the end, contributed to deeper thinking on teacher education and research issues.

At the end of the workshop, I asked the twenty-four participants to complete a survey to evaluate the week's activities. The response was very positive. One question asked them to list three of the best things that came out of the workshop. A compilation of their responses is below:

Table 6.1 – Workshop Evaluation: "The Best Things to Come Out of Workshop"	
The Best Things to Come Out of Workshop	**# of Responses**
Themes of: collaboration, dialogue, cooperation, collective responsibility, agreeing on a way forward, partnership of CDS as a college thing (and not a PS thing)	26
Themes of: actual documents that were/will be generated – BTTC guide to CDS, marking scheme/guide, interrogatives for ch.1, supervision check list	16
Themes of: greater understandings of aspects of research and CDS	9
Other comments	4
Themes of: clarification of role of PS and members assigned to sections	2
Total Comments	57

The largest proportion of comments related to "how things were done." There was a general appreciation that the process was one of collaboration where various views were respected and encouraged. Also, there was a large number of comments valuing a future tangible product, i.e., the guide that would support lecturers in preparing, supervising, and assessing students doing the CDS.

The PS section also wanted to know what issues and concerns remained with the participants throughout the workshop. We asked them to list three concerns that were still unresolved. A compilation of their responses follows:

Table 6.2 – Workshop Evaluation "What Concerns Are Still Unresolved?"	
Unresolved Concerns	**# of Responses**
Themes of: standardization of supervision – ways of doing, loads, consulting	7
Themes of: lecturers need more support in research methods	6
Themes of: attitudes and behaviors of some lecturers in terms of not supporting a positive movement towards implementing a new CDS	6
Themes of: implementation of some of the decisions from the workshop– marking guides (in sections & application), mid-term consultations, selection of topics before exposed, method of citation	6
Themes of: PS coordinating with sections	5
Themes of: continuance of the support and dialogue	3
Themes of: the timing of conducting CDS, especially for the PADE and Tech/Voc groups	3
Themes of: presentation of CDS to external assessors	2
Total Comments	38

While participants were generally positive about the experience, there were concerns about our being able to maintain the momentum in terms of commitments and working out further details, especially in the area of supervision. Participants indicated a need for further support and training in research practices.

In addition, I wanted to get a sense of whether the participants wanted to stay involved in furthering their experiences from the workshop. I asked them to

indicate their interest level in participating in future workshops focusing on research practices. The results follow:

Table 6.3 – Workshop Evaluation "Interest in Participating in Future Workshops"	
Interest in Participating in Future Workshops on Research Practices	**Percentage**
Not interested	0 %
Could be interested	5 %
Somewhat interested	15 %
Very Interested	45 %
So interested that would be willing to assist in the organizing	35 %

Eighty percent of the participants indicated that they were very interested or so interested that they would be willing to assist in organizing future workshops. I took this response to suggest that the participants felt strongly about the usefulness of the workshop as a tool of professional development.

In our research plan, we did not expect the workshop to be a "one-shot deal" that would fix all the problems with the CDS research project. Our hope was that it would be a starting point for dialogue. We wanted to frame the debate so that the college would be addressing issues related to the substance of research, i.e., the deep thinking and questioning aspect of the process. We wanted to divert the discussion from a turf battle where a logistical issue such as who receives the students' marks becomes the primary issue.

The CDS Guide – Instituting Change

The most tangible outcome of the workshop was the *Educational Action Research CDS Guide*[19]. Using ideas that came from each group's presentation during the week, I edited the guide, which was published in September 2000. In

[19] A copy of the *CDS Guide* can be obtained through Belvedere Technical Teachers' College, P.O. Box BE 100, Belvedere, Harare, Zimbabwe.

general, the students and lecturers have been very interested in having the guide. It is the first time the college, as a whole, has laid out expectations for the CDS. One student piloting the guide approached her research differently. She stated:

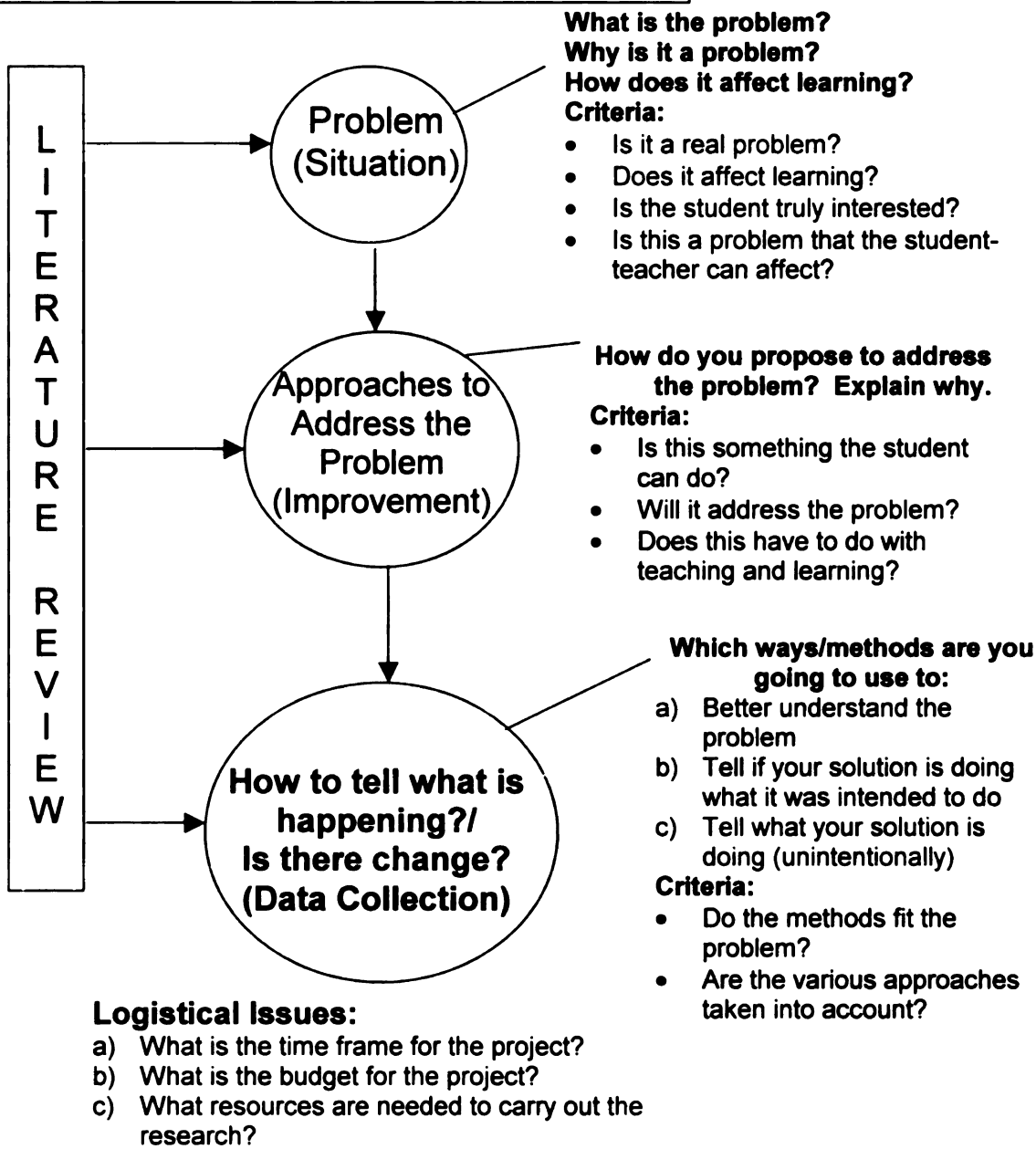
> When you pick a topic, you should have a problem first... when I first heard about CDS I wanted to have a topic, not a problem... That is why I came up with this one, corrections, because I first heard that problem of students getting the same problems wrong time and time again [even after they make corrections from their returned exams], so I said, 'Okay, this is a problem. What may be the solution?' That's when I came up with this [proposal]. So it's helped.

While I was delighted to have a substantial product from the workshop, tensions have persisted. The goal of the guide was to capture everyone's deeper understanding of research in a way that would support and challenge students to engage in doing better CDS projects. Some lecturers wanted the guide to be a rulebook for students to follow. Since lecturers for all the sections were represented, it made sense to make decisions that would be binding for the whole college in terms of the CDS. Also because this represents the first time most of the students will be doing research, we ought to be explicit about the expectations. For instance, Lisa Delpit (1988) describes how African-Americans students in the U.S. often struggle and fail because teachers have an understanding of expectations but, for fear of being overly directive of student thinking, they never explicitly explain it to these students.

On the other side of the debate were the lecturers who wanted the guide to promote a general and conceptual understanding of research practices so students could decide which approach(es) would be most useful for their needs.

The compromise was to include the procedural aspects with the understanding that students and lecturers would dismiss them once they understood what they are and, at the same time, include heavy doses of the conceptual and alternative approaches. Like most compromises, the guide has aspects with which each group was less than satisfied. For instance, the guide does not break out of the traditional five-chapter report structure, but the explanation of the proposal is more conceptual and less formulistic. In "Part 2 – Project Proposal", the main part is the model below.

Figure 6.5 – CDS Guide: Model of Project Proposal



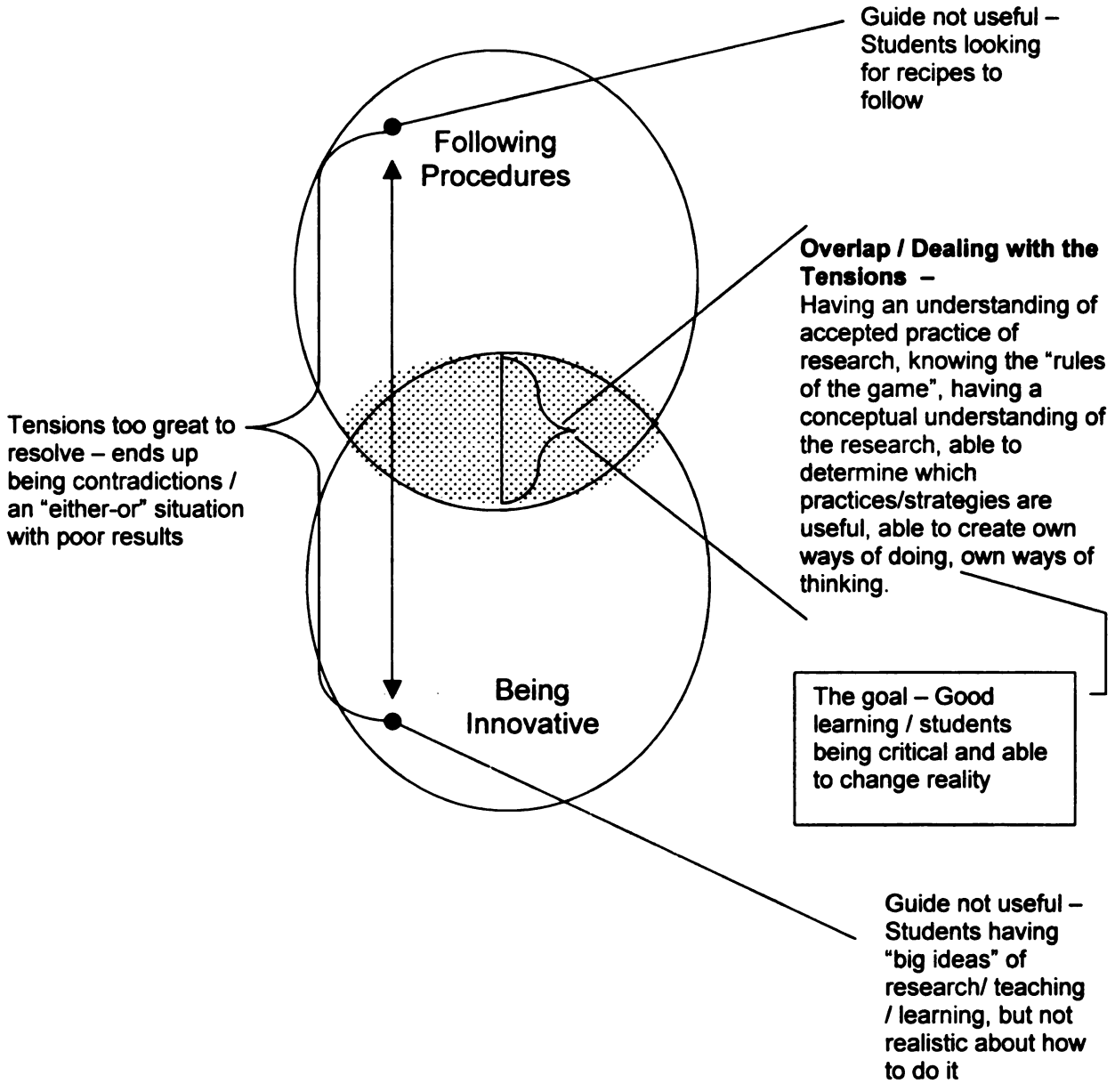
This approach was a clear movement away from the common practice of presenting the first three chapters of the report as the proposal. The intention was for students to think first about a real problem, then to think of ways to address it, and then to think about data collection. While supervisors agreed upon the conceptual part, they were unclear on the desired format and structure for students' proposals. For fear that students will pay more attention to following

a prescribed format at the expense of conceptualizing their research, we did not include such a structure in the guide.

Discussion

Without tensions, dialogue would not be needed, and the opportunity for growth would be limited. Most of the above issues result from a tension between following procedures and being innovative. David Labaree (1997) argues that having strong advocates from various sides of a debate is a much more healthy state than having any one side dominate. When one side becomes too dominant, vital issues can be easily neglected. In our case, having students merely follow procedures would not help them become critical problem-solvers. Being innovative without having structure would not help them take concrete steps in examining real problems, and their great ideas would not translate into meaningful learning activities in the classroom. The figure below shows how the tensions at each end of the spectrum are incompatible with no compromise evident. However, there is an area where interests overlap, and getting to that place is our goal.

Figure 6.6 – Tensions between following procedures and being innovative



The figure above shows how an overlap can produce positive results – where students learn basic procedures of research practices and develop their own ways of thinking. I believe that it is at this juncture that students can be most critical, and this is the goal for the *Educational Action Research CDS Guide*. Ideally, the guide would provide students with some concrete examples of research strategies in order for them to build a conceptual understanding of

what it means to examine a problem or issue in depth. From that point, students would develop their own tools and ways of thinking that would assist them in improving teaching and learning. Had I, as editor of the guide, gone to one end or the other of the above spectrum of following procedures or being innovative, the guide would not be useful for our context. At one end, a recipe book for students to follow would not encourage students to develop their professional skills of problem solving and critical thinking. At the other end, students being completely innovative, the guide is doomed for failure. Being able to implement innovative thinking requires building from existing knowledge and skills. While the PS section leaders hope that students are able to think critically enough to determine which practices are useful and which ones are not, we believe they need to have an idea of what they are rejecting.

Where Do We Go From Here?

To promote these skills for our students, everyone representing all points of the spectrum needs to be involved and become advocates. Hopefully this tension will maintain a healthy debate about how we should prepare and support our students at BTTC. However, this dialogue will not continue simply because we produced a guide. There are many tasks college lecturers must do to further our thinking. Students' voices being absent in the workshop and the production of the guide was an obvious oversight on our part. If our goal is for our students to be problem-solvers and critical thinkers, there was no good excuse for us not including them more in the process. Since then, I have asked them to evaluate the guide and share their thinking about the CDS project with us. While we

continue to support students in their research projects, we need to listen better to them.

Further workshops are needed. These are rare opportunities for people throughout the college to engage in a dialogue focused around a particular issue. To maintain a culture of reflection and action, the PS section needs to continue to establish structures where lecturers to come together to share our thinking, to organize, and take action. Those of us at the first CDS workshop were successful in these endeavors. Unfortunately, only one person from each section attended. Additional workshops for all subject area section members have been organized. Three weekly workshops for all vocational/technical subject lecturers took place in January and February 2002. Workshops for academic subject lecturers are being planned for March 2003. Also PS visits to sections have continued throughout 2002.

While boundaries between sections, in particular with Professional Studies, have decreased, the process is far from complete. If the college is to effectively prepare students to engage in meaningful teaching and learning, the faculty needs to continue to share a common commitment to construct a vision of teacher education. Lecturers have indicated interest in developing a research group where faculty members support and challenge each other in engaging in our own research. If we are to be effective teachers of research, then we should also view ourselves as researchers.

As mentioned in chapter three, action research does not separate the research process from teaching and learning. As a community we need to

challenge ourselves to think deeper and clearer as well as support each other in asking difficult questions and taking steps in action. The PS section's research endeavor is far from over. As the models of action research suggest, the process is a continuous cycle of deeper reflection, making innovations, and learning. My effort to share our insights is not to profess having particular answers, but to open the dialogue to a wider community.

However, this dialogue has remained limited to BTTC. Voices of key stakeholders have been absent. University involvement has been minimal. In December 2000, Tom Bourdillon, a leading advocate of progressive reforms died in a car accident. Mr. Bourdillon had been the chairperson of the UZ Department of Teacher Education, and he was always eager to support BTTC lecturers in dialogue about rethinking teacher education. As mentioned earlier in this chapter, he attended the first workshop. He also attended subsequent meetings to review the *CDS Guide*, where he continually challenged lecturers working on the guide to not fall back into being overly prescriptive of the research process. The following year DTE's Link Person with BTTC changed. Within months, the person left the country without making arrangements for her responsibilities to BTTC. As a result, proposals for workshops were lost and shuffled from one person to another.

Another voice conspicuously quiet was that from the Ministry of Higher Education and Technology and the Ministry of Education, Culture and Sport. Not only did representatives not attend any workshop, meeting, or discussion relating to the CDS, rarely did they ever come to the campus. These two major players

in the national debate of education not being included in the BTTC dialogue could be a sign of their lack of interest or isolation on the part of BTTC.

The then Minister of Higher Education and Technology Mumbengegwi, who oversaw the nations' colleges and universities, had a more confrontational relationship with the lecturers at the college. As an example, at the end of the 2002 school year, he eliminated future English and Development Studies programs at the college. College lecturers were not involved in the decision-making process, and they were given minimal justification for the action. In a letter to the college, he said that the sections were not consistent with the Ministry's effort to make BTTC more "technical" and more "scientific."

In the second chapter, I argued that BTTC had space to have a pedagogical dialogue because the national debate was preoccupied with other issues, most notably concerns of nation building. I also discussed how issues from the larger society can enter this space. The Minister's decision was contrary to the dialogue regarding the CDS at BTTC. For instance, lecturers had voiced a concern about students' lack of writing skills. Eliminating the English section meant that there would be no study of any language. ChiShona and SiNdebele, the two major indigenous languages, had not been offered since the mid 1980's. As a result, advocates to promote more meaningful and rigorous language standards in the CDS and throughout the college have been reduced.

As I discussed in chapter three, action research primarily reflects a liberation ideology. However, the dialogue in the college shows that there are tensions within each of the perspectives. While some lecturers are following an

agenda of liberation ideology more than others, the issues are related to the realities of the perspective. How much to change, challenge status quo, and promote innovation needs to be balanced with how much to keep stable, accept current standards, and offer procedures that can be followed. These are some of the tensions that need to be addressed within a liberation ideology perspective. By having some lecturers with perspectives other than liberation ideology, these tensions get negotiated. Had all the lectures believed in one perspective, key issues would not have been addressed. The innovation from students would have missed much of the foundational skills and knowledge of doing research or students would be blindly following meaningless procedures to complete their CDS.

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CHAPTER 7
Conclusion

Finding Something Other Than the Expected

While the reforms at Belvedere Technical Teachers' College did not follow the dialogue of critical pedagogy I was expecting to find, I discovered valuable lessons regarding democratic changes at a teacher college level. There is no pre-ordained path to follow in charting the way through democratic change. The going is usually complex, messy, slow, and filled with tensions. Those involved in the dialogue come to the table with various backgrounds, experiences, and perspectives, which determine the formulation and direction of dialogue. Then, along the way, tensions stemming from each person's difference are continually being negotiated and renegotiated. At times, it seemed like there could have been a different model that would have been more efficient in terms of getting things done. Especially in an exam-based education system that focuses on "giving the right answers", it would have been easier to appeal to a higher source of knowledge and simply tell lecturers the "right" way of supporting and challenging students doing research. However, in the end, that process would have been simply giving legitimacy to such a hierarchical power structure, rather than challenging it.

At the beginning of this three and a half year research project, I was expecting to find critical pedagogy taking place at BTTC. I wanted to gain a deeper understanding of what critical thinking looks like on a level larger than an individual classroom. I had seen and read about some amazing teachers promoting critical thinking in their classrooms, but once it became elevated to a

school-wide, district, or national level there were fewer examples. The issues seemed to become more abstract and, in the end, it is less clear what critical pedagogy looks like on those levels.

In this research, I have not focused much on critical pedagogy because it exists under layers of other issues, not because I was no longer interested in it. I found the realities of BTTC different from those of the Western teacher education institutions that have propagated this dialogue of critical thinking/pedagogy in regards to teacher education. Rather than using the language of "critical thinking/pedagogy", lecturers and students at BTTC discussed similar issues but in the language of encouraging students to think for themselves in solving problems of the classroom.

There were many discussions/debates in the staff rooms regarding the oppressive nature of the state, and there were several lecturers who discussed the problems of the hierarchical structure of education. These lecturers were self-reflective; they experimented and advocated for more democratic structures regarding supervision of teaching and research. In general, the majority of lecturers I worked with did listen to the students and were advocates for their causes. While these dialogues were very similar to those of critical pedagogy, they neglected to draw direct links between the power/political structures of the classroom and those of the larger society.

The elements that I was expecting to find (but did not) were those that were critical of how the structure of schooling reflected oppressive aspects of society. I did not observe anyone discussing the irony of teaching "pedagogy" in

a "lecture theatre," for instance. While the exam structure at the college was not as rigorous as that for secondary school level, there were still many reasons to be critical. While questions for final examinations were set at the college level, the Department of Teacher Education at University of Zimbabwe approved each exam and students' marks. The Professional Studies section put much effort in making the exams a thinking exercise for students; however in the end, much continued to depend on students giving the "right" answer. (Similarly, many students viewed the CDS as a process of trying to figure out what their supervisor wanted.) There are many limitations when an exam is developed prior to the teaching of the course, there are large numbers of students, and students in different classes taught by different lecturers take the same exam. Also, I did not come across discussions questioning the legitimacy of the "O" or "A" level exams for the secondary schools and how they perpetuate the power of knowledge remaining in the hands of a very few.

Rather than questioning the power structure of an exam-based system and oversight by university assessors, lecturers and students focused their discussions at a different level. They did not advocate for a complete change of the power structure; they argued for the current structure to be more amiable to their interests. For instance, instead of questioning the validity of assessing student-teaching practice through two unannounced observations, students and lecturers attempted to find ways to integrate methods of support prior to the evaluations. The lecturers would maintain their power to independently generate a score for the student through a single observation, and the students still would

not be able to challenge the score they received. The change would be that the students would have an opportunity to meet with and be observed by a supervisor once or twice without being assessed.

The CDS was a unique opportunity for students and lecturers to engage in teacher learning that challenged traditional notions of power in the classroom. In theory, the students were encouraged to be innovative in solving a classroom problem. They had more control of the research process – including choosing the topic and deciding when and how to do the research. At times, these aspects of action research were challenged by lecturers with more conservative views of the classroom, and tensions regarding power structures existed. Most lecturers with research experience had been trained in a traditional, positivistic quantitative approach to educational research.

The idea of having the research "belong to the student"— their having control of much of the process – was discussed and, as a result, the college debated and negotiated the power structure between students and lecturers. Also discussed were issues related to power structures from above. Some lecturers complained of having to require students to have a "hypothesis" and "assumptions" when they did not appreciate a difference between the two. Because university assessors will demand that hypotheses and assumptions be presented in a particular way in the name of academia, lecturers were leery of allowing their students to submit a report without the terms being included. Through dialogue, the lecturers began building a common language of what these terms meant. Rather than depending on an outdated research manual to

give the definition, lecturers shared their understandings of the terms and their relevance to writing a research report. Once a common understanding was organized and written in the CDS guide, lecturers stated that they felt more comfortable in defending the structure of students' work to the university assessors.

Since the dialogue at the college did not take the form of identifying the political relationships of the structures involved, I did not focus on the *critical* thinking aspect. Instead, I examined the *constructivist* thinking aspect. This is the process whereby individuals and/or groups develop their own ideas and ways of thinking.

Doing research and supervising it were relatively new activities for other lecturers, and as a result, many of them were not entrenched in a particular way of doing research. Thus, dialogue encouraged individuals to share their ideas of what it means to do good research, and there were fewer assumptions that everyone agreed on what leads to good research. As a result, lecturers engaged in constructivist thinking to build common understandings of what is good research. However, tensions continued to exist. Even though lecturers could agree on a common vision of research as shown in chapter six, they maintained various views of the level of authority a student-teacher should have in doing research.

While these issues were discussed, on the ground, lecturers and students had much latitude to do what they wanted. While the Ministry of Higher Education and Technology and the University of Zimbabwe had controls over

BTTC, the former groups rarely showed interest in the dialogue developing around the CDS. As a result, each teacher college and each section within a college had much room to determine how they would carry out the CDS. This latitude was also available at the student level. Depending on their supervisor, students had much flexibility in how they did their research. However, having the space does not necessarily lead to a meaningful research project.

Some students were innovative in doing their CDS. Auther challenged the traditional way agricultural practicals had been done in most secondary schools. Rather than a learning tool, practicals were more often used as a means to elicit free labor for schools' garden plots. Auther listened to his pupils and, in the end, he learned the importance of their involvement in making school activities meaningful. While this is a valuable lesson in itself, I wonder why Auther did not draw connections between his CDS and the larger political/economic structure of the nation. As mentioned in chapter two, pupils have been critical of practical subjects throughout the country's formal, education history. While ZANU PF continued to use rhetoric of land being the primary issue of the day, why did Auther not discuss the relevance to his project? He could have viewed himself as being on the forefront of creating a new farmer for Zimbabwe – one that is no longer a mere farmhand on a large commercial farm. He could have discussed with his pupils what it meant to have "ownership" of a farm – including the responsibilities to the land, community, and state. The fact that these discussions did not take place does not take away from Auther's learning to

become a teacher, but it is an example of how the critical element of making connections between the classroom and society rarely took place.

Grace, the most organized and clear thinking of all the students in the study, did not challenge the structure of school at all. While her work was well thought out, it did not question the power of knowledge structure embedded in the examination process. In fact, her research could be seen as promoting exams by making the process more efficient by making pupils better test takers. While much of her research revealed that exams were not an indication of what pupils understood, she never suggested that the exam structure be altered or eliminated. She could have used her research to show that exams perpetuate a hierarchy of knowledge. Pupils' common, everyday understandings of tools and practices became transformed in an academic process where they were stripped of their knowledge. For example, many of Grace's pupils had been using a hoe and shovel for many years but were unable to define the tools and state their functions on a test.

Just because the critical pedagogy/thinking element was not as prevalent in the dialogue as I had hoped does not suggest the changes taking place were not meaningful and did not challenge the power structure. In subtle ways, the Professional Studies approach to the CDS did challenge power structures because of its democratic approach. Lecturers' questioning the need for having both "hypotheses" and "assumptions" in a research project is an important first step in questioning who decides what is required for legitimate research.

The dialogue that did take place did a number of things to make learning more meaningful at BTTC. Firstly, it involved every lecturer at the college. By visiting each subject area section and conducting workshops for lecturers, the PS section made a concerted effort to bring all lecturers into the dialogue. The message was that everyone's view was valued, and that everyone played an important role in making improvements at the college.

Secondly, the dialogue re-framed the issue to focus on teaching and learning issues. In the past, debates of non-substantive practical issues dominated discussions regarding the CDS. For example, there had been heated discussions on which section – the PS or the subject area – would submit the marks for the written reports. The focus has shifted to issues such as: what makes a good topic; how to prepare students to understand expectations of the CDS; and how lecturers can best supervise students when they are in the field.

Thirdly, the process promoted democratic and constructivist values. Those with various points of view were encouraged to share their ideas and thought processes with the intention that together, all those involved could succeed in making the CDS anything they wanted it to be. Outsiders were not necessary in dictating what should be done or how to go about doing it. Those issues were discussed on the ground level with little outside involvement. Rather than waiting for someone from the University or Ministry with the answers, the leaders of the PS section used a dialectic process to promote the idea that each individual should get involved to do their part in pursuing the way forward. Dialogue, by its

nature, is democratic. The intention is not to win others to one particular perspective as much as to pursue a common, deeper level of understanding.

Re-Examining Questions Posed

At the beginning of chapters two through six, I pose questions to encourage thinking of the issues discussed. As mentioned in the introduction, I did not intend to give "answers". Rather, I hoped to encourage deeper reflection on the questions themselves. In this final chapter, I revisit the questions from each chapter to share my thinking.

The questions for chapter two:

> *Assuming the premise: A meaningful national dialogue regarding substantive pedagogical issues requires the involvement of all stakeholders. How does a national discourse of stakeholders from various perspectives develop in a country with a colonial legacy of over one hundred years of oppression? How does such a discourse assist reforms on the ground?*

Brown et al. (1997) argue the value of understanding the competing interests, values, and power relations. They point out that there is more conflict than consensus when addressing the key issues of Western education. They state that education has been intimately linked to concepts of democracy and that education could be viewed as a "site of struggle" (pp. 12-13). Most often, advocates of any one perspective would prefer not having to engage in tough negotiations for their agenda to be instituted. However, that situation would not lead to a robust dialogue of key issues.

While various stakeholders' perspectives had dominance at different times in Zimbabwe's history, few periods enjoyed a balance between different perspectives. For a brief period following the liberation struggle, different

agendas were incorporated into the national dialogue on education. Rhetoric of liberation ideology linked the development of education with the liberation of the country. At the same time, concerted efforts of nation building attempted to bring different groups together within one state. Also, international sanctions were lifted and the state attempted to join the global economy through trade. The different perspectives were needed to address the complexity of issues facing the country. At that time, the leaders of the state were willing to attend to the difficult issues of the day.

The present period is more typical of Zimbabwe's history. Rather than dealing with key issues directly, the state attempts to maintain dominance of one particular perspective. What will bring about a willingness of leaders to encourage opposing points of view in addressing the key issues of the day? As there have been movements towards democratic practices throughout history, there have been those attempting to obstruct such progress. Currently in Zimbabwe, many groups are working for democratic change. Forums for opposing points of view such as trade unions, independent media, and non-government organizations have attempted to bring voices of different perspectives into a national dialogue. How long the state will be able to silence these voices is yet to be known.

Belvedere Technical Teachers' College demonstrates that on a micro level it is possible to create a culture of listening to opposing points of view, committing to work with all who are involved, and negotiating important issues. However, there is always room for progress. The fact that students were not as

represented in the dialogue as we had wished is an indicator that the power relationship between student and lecturer/administrator continues to be an issue.

In the larger context, complexities increase, and the task of changing culture is that much more difficult. Many Zimbabweans are grappling with the issue of how to promote democratic structures in an oppressive context. The solution will come from the struggle of many people.

The questions for chapter three:

> *Assuming the premise: educational reform in teaching and learning should include a collective negotiation which includes various views/agendas from various theoretical perspectives. Is it possible for action research to create a forum for this negotiation to take place on a micro level (individual teachers in classrooms)? On a macro level (Belvedere Technical Teachers' College or national level)?*

As I discussed in that chapter, action research is often viewed in conjunction with larger reforms of rethinking teacher education to be a more critical reflective process. Action research promotes ideas of dialogue, collaboration, and constructivist thinking; however, action research does not have a monopoly over these concepts. It is a mistake to believe that any one reform is capable of making significant changes in isolation. An environment that promotes action research is an environment that supports and challenges teachers and students in joining a dialogue of critical reflection. Action research does not offer any special promise; it is not a "magic bullet."

Action research does provide a forum for teachers and lecturers to engage in a critical reflective process that begins with oneself. I believe that effective teachers naturally engage in self-reflection processes. They examine their classrooms with an eye towards better understanding what is happening,

reasons why, and ways they can make improvements. However, these teachers often do not record their findings in a way that is easily shared. Instituting structures where teachers and lecturers are encouraged to share their insights continues to be a challenge at the college and national level. The more teachers and lecturers share their experiences and insights on substantial pedagogical issues, the more the dialogue develops into something capable of addressing such problems. However, the question of what action research is and can do will be resolved by those engaging in the practice.

The questions for chapter four:

Assuming the premise: the CDS is an opportunity for meaningful dialogue to enhance teaching and learning at Belvedere. What conditions at the college are needed to create a conducive environment for effective teaching and learning? Do these conditions exist and promote dialogue or did the dialogue happen in spite of the conditions?

Are the ways of doing action research – that exist in practice – compatible with the ideals of constructivist and reflective teaching and learning that the CDS is trying to promote? In what ways are they incompatible?

Key elements for most progressive reforms to be effective include: a commitment to change, a willingness to take risks, a genuine interest in sharing ideas, and an ability to work together. The administrators and lecturers at Belvedere Technical Teachers' College demonstrated some of these qualities. Some leaders took the initiative to establish stronger links of communication while promoting an agenda that supports the ideals of the sections and college. While many lecturers were thoughtful, reflective, and effective, this dissertation is not a story of exceptional people. BTTC is not an unusual teachers' college. In a personal interview Tom Bourdillon (1999), the head of the Department of

Teacher Education at the University of Zimbabwe responsible for evaluating all national teachers' colleges, identified other colleges he believed to be more advanced than BTTC in terms of instituting the CDS.

Tensions between those promoting change and the structures that are obstacles to change existed at BTTC. Like other bottom-up approaches, the reform of the CDS required support and challenge among colleagues as much as it did from administrators. Cooperation and trust were essential, and these qualities existed at different levels at the college. The dialogue was complex; and it would be false to portray a situation where all the members of the college openly joined in a common dialogue. For example, Mr. Chandauka visited each section simply to ease tensions and open doors for more meaningful discussions. Some lecturers simply opted out and chose not to engage in dialogue about the CDS.

In the process of instituting action research as an approach to the CDS, many lecturers shared ideas about research and participated in developing college-wide expectations. By engaging in constructivist thinking activities, several lecturers took the role of protagonist in listening to students and discussing ways of improving the preparation and support of the research project. It remains unknown how much the lecturers changed their epistemological views from believing knowledge only comes from sources of higher authorities to holding a more constructivist perspective. However, the willingness of lecturers to discuss ideas and create solutions through dialogue

suggests that, to some extent, they were willing to view themselves and their colleagues as experts.

The CDS is not without its contradictions. As mentioned earlier, students' role in the process of developing expectations was minimal. They were given a difficult task of doing the CDS. While engaging in the complex assignment of teaching practice, they were required to construct and carryout a research project with no previous experience. Many lecturers indicated that they were not clear about "what is the CDS." Lecturers worked collaboratively and engaged in dialogue to create deeper understandings of research and the CDS. On the other hand, students were often left to their own devices to figure out what they had to do. Without support, the CDS guide was no different from other references that purport to tell students how research should be done. Identifying ways to have students more involved in the dialogue is vital for addressing these contradictions. The environment can always be improved to be more conducive in encouraging other stakeholders to have a voice in the dialogue. Thus, the question of how to address the student/lecturer power relations in order to make conditions more favorable for effective teaching and learning needs to be a continuous part of the dialogue.

The questions for chapter five:

Assuming the premise: Students will take advantage of the opportunity to engage in dialogue about their work. To what extent do individual students engage in dialogue and critical thinking regarding their action research on teaching and learning in their classrooms?

What issues concerning the context and conditions of students' teaching and learning get addressed in this dialogue? What role do these issues play in the larger dialogue of education reform? That is, how does the

micro-level dialogue of students engaging in the CDS at BTTC reflect or impact on the macro-level dialogue at the national level?

The CDS was one of the few assignments that required students to create their own solutions. Their success was on many different levels. For example, Patience and Tobias were able to organize a research project and submit a report. Neither one identified ways their teaching had changed due to engaging in action research. While both were willing to discuss their teaching and research, they did not demonstrate an openness to critically examine their teaching practices. Tobias was determined to compare models to charts when he already believed that models were more effective. Questioning him on the value of such research on his teaching did not change his approach. Patience was more savvy in engaging in discussions, yet after the process, she reported not having learned anything new and not changing her teaching practice. While it would appear that these two students did not benefit from dialoguing about action research, there are possible benefits that they may have obtained. This may have been the first time these student teachers were supported and challenged to think critically about their own practice. While the dialogue may not have borne fruit in terms of critical reflection at that point in time, my hope is that these teachers will be supported and challenged to engage in reflection of their teaching practice through ongoing dialogue.

Prior to teaching practice, Grace had been prepared to think deeply about her research project and engage in critical reflection on how it influenced her practice. She was posing questions to herself. She wanted to know how a pupil could miss nearly all the questions on a multiple-choice test. Rather than

grasping at the easiest answer, she thought deeply about the role of language in thinking and knowing. She discovered that English was used for getting the "right answers" without questioning and Chi-Shona was used for discussing and thinking. She came to this realization through dialogue – partly an internal one and partly with others supporting and challenging her.

Auther, the most receptive to the dialect process, understood the relationship between doing the CDS and critical reflection on his practice. Through a dialectical process, he articulated that he learned that through experimenting and listening to pupils, he could solve most classroom problems. He had learned to be the protagonist in the classroom.

Some lecturers reported dialoguing with students regarding the CDS. At the same time, most students indicated the value of having such discussions. Many students showed a genuine desire to have someone help them identify problem areas and give direction for improvements. The most common complaint students had regarding their supervision was related to lecturers not spending enough time in meaningful discussions with them.

The message from the students is unambiguous; they want to be more actively engaged in dialogue regarding the CDS. If they did have a more active role in the dialogue, then there could be a more critical reflection regarding the context and conditions of the students' learning. For the CDS to become more effective, the supervision should focus on how to better listen to students and engage them in dialogue. Increasing the role of the students' perspective will

compel the negotiated dialogue to address the issues most pertinent to the students' experiences.

The questions for chapter six:

Assumption: The dialogue is to begin with the current perspectives and realities of the lecturers at the college. What is the tension between supporting a variance of perspectives and promoting some over others that are more conducive to a dialogue? What is the role of advocates from one perspective trying to convert those from another perspective? Are all perspectives equally legitimate as long as they have supporters?

Who else needs to be included to make the dialogue more meaningful in terms of promoting effective change? What should be the role of students, of university professors, of central administration, of politicians in this dialogue?

Because the dialogue is still in infancy, the focus should be on expansion in regards to how to make action research a meaningful part of supporting and challenging students to critically reflect on their practice. Including various perspectives means that the dialogue will become more complex, and more negotiation will be required. Tensions will increase. However, the dialogue will be more capable of addressing issues in ways that work for more of those involved. As discussed earlier, democracy requires having faith that people will think deeply and support the views that are productive for all involved. Attempts to marginalize any particular perspectives runs contradictory to the concept of having a dialogue.

In the current national context, progressive groups have the added responsibility of incorporating views of those whose voices' have been silenced. If the opposition is to provide a libratory alternative to the present regime, different perspectives need to be negotiated in an open dialogue. There is a

need for a new culture that demands responsiveness and accountability of self and others, as well as a commitment to work together for a better future for all.

In his 1994 Planning for Education Systems class at Harvard Graduate School of Education, Noel McGinn argued that it is easier for different groups to agree on a vision than it is for them to agree on more immediate issues on the ground. Once the vision is agreed upon, then it is possible to gain consensus as to what structures are needed. In terms of action research and teacher education, it is possible for all stakeholders to agree on a vision of effective\reflective teaching and learning. This dialogue can take place at the college and\or the national level.

As long as the dialogue takes place, visions for effective and reflective teaching and learning will evolve to address the context of Zimbabwe. Dealing with tensions from the perspectives of various stakeholders is what gives value to the dialogue. Sharing ideas, finding commonalities, and understanding differences lay a foundation for different groups to work together to address substantial pedagogical issues. Through this process, individuals from each perspective are challenged to reflect on and articulate the essential elements of their agenda. As a result, individuals engaging in dialogue gain a deeper understanding of other perspectives as well as their own, and chances of any one perspective becoming dominant and distorted are minimized.

The questions posed in chapters two through six do not elicit easy answers. If the dialectic process continues, some of the answers will evolve from a process of addressing substantive pedagogical issues. While other questions

will become irrelevant and continue to be unanswered, more important questions will arise. If the dialectic process does not continue to develop, then the questions will lose their value.

The Complexity of Dialogue

The dialogue at BTTC embraced a difference of perspectives from within the college. However, the impact of this dialogue did not expand beyond the boundaries of the campus. As discussed in chapter two, those involved in the national debate were preoccupied with nation building. I am not suggesting that liberation ideology had to be the dominant perspective for the dialogue of the CDS to reach the radar screen of the national debate. Rather, there needed to be a balance of perspectives (liberation ideology, free market, nation building, and globalization) for the debate to focus on substantial pedagogical issues. Had the national debate focused on such issues, there would have been a greater relationship between the dialogue on the micro level (at BTTC) and on the macro level (the nation).

The message of the BTTC dialogue is symbolized in Tom Bourdillon's quote from chapter four. "Deal with the problematic. And don't imagine that the solution you come across is going to be a permanent solution. It's a modus operandi that you continually try to improve." By encouraging different perspectives in the dialogue, BTTC lecturers were able to make significant steps in addressing issues of the CDS. The current solutions will need to be re-visited, re-debated, and re-negotiated. As long as this dialogue is the "modus operandi," lecturers will be able to address the issues of the day.

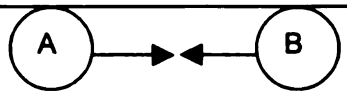
The national context was not conducive for this particular education reform, as noted in chapter two. Rarely, if ever has the national debate on education revolved around the substantial pedagogical issues. The reality is that on the national level, those holding different perspectives have not been encouraged to join in dialogue. As a result, institutions such as BTTC need to organize their dialogue in spite of the larger context. Most of the time, BTTC had the space to promote the CDS dialogue, but at times, outside factors complicated the process. Police forcing students to remain on campus; the Ministry of Higher Education and Technology eliminating English and Developmental Studies; and the government reducing subsidies to students are some of the realities that the college had to address while trying to negotiate what is the CDS and how it should be supported.

Rarely has a liberation ideology been promoted wholeheartedly by the state. While the rhetoric was used during the liberation struggle, the agenda of this perspective has had a minimal role in the national debate. In this dissertation, I have argued that it should have a role in the dialogue – not necessarily as the lead but as an active participant. As discussed, the reforms described do primarily take a liberation ideological perspective. It is through such reforms that the perspective will be brought to the floor.

While the dialectic process has many benefits, it is complex, messy and slow. At one level, debating (or arguing), ideas and information get presented, but the understandings usually go no further. In the model below, side A presents a case and side B presents another case. There is no direct need for

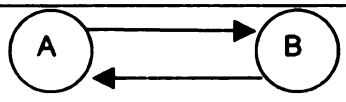
either side to listen to the other, and one will finally win out, usually due to issues revolving around power.

Figure 7.1 – Model of Debating Ideas



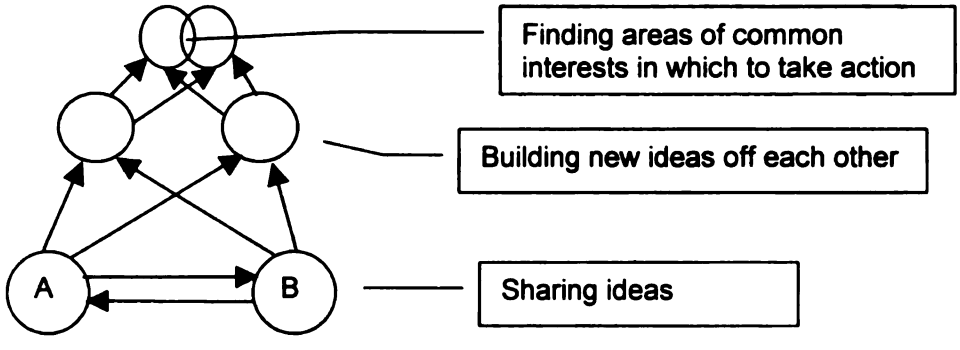
At another level, the two perspectives share ideas. Information and ideas go back and forth to each side. Each side listens to the other, yet there is no need to do anything with what they have understood. The model below shows the sharing of ideas and information.

Figure 7.2 – Model of Sharing Ideas



The third and final model shows dialoguing as a way of sharing ideas and information in attempts to build new ones. Responses are not only directed towards the original perspectives but also to the new ideas. Both sides A and B create new ideas together, and new ideas generate more ideas. At some point an overlap of ideas and their agendas takes place, which creates a basis for which action could take place.

Figure 7.3 – Model of Dialoguing



The purpose of showing this model of dialogue is to show how complex the process becomes. Not only is a person talking with another person sharing ideas back and forth, but also one person's ideas respond to the other person's ideas. The ideas are no longer a result of an individual's thinking but the dialectic result of people building ideas off of other ideas. It is possible to see how quickly this relationship becomes more complex over time and with more perspectives involved.

I am not suggesting that with more dialogue different perspectives would or should develop into a single common one. As discussed earlier, I believe that it is healthy for tensions to exist. I do believe that commonalties and differences should exist at the same time to maintain a healthy tension between various perspectives. Common interests are necessary in order to have consensus for taking action, and the differences will ensure that no one interest is allowed to become dominant and distorted.

Also indicated in the model is that the dialogue begins with individuals sharing their ideas and knowledge; that is, it grows from where the individuals are. A dialogue cannot be forced to take a particular direction. Just because I wanted a particular kind of critical pedagogy to be discussed, does not mean that I could have coerced it. A dialogue is like a dance with many partners and all of them are trying to lead. The contexts (the college and national level) constitute the many layers of the music. In the process, many toes get stepped on and it gets messy, but at some point a rhythm gets going and something happens. It is different every time, but it would not happen if they stayed in their seats.

What Does This Mean?

Commonly, reforms are introduced by Western institution or handed down through one of the ministries of education. Some of these reforms are effective and some are not, neither being the focus of this dissertation. Rather, I am advocating for an alternative to that approach, one that is democratic. In chapter three I argued that if Zimbabwe is to develop teacher education programs that will address the needs of the nation and reflect the liberation ideals, then democratic reforms in teacher education must be supported.

Amy Gutmann (1987) has argued that democracy requires two major principles: *nonrepression* and *nondiscrimination*. The idea is that an open deliberation is to be encouraged, and everyone should be included in the process. However the terms she uses are too passive for the pursuit of democracy. A lack of repression and a lack of discrimination do not necessitate meaningful, active participation.

I have been advocating dialogue as a tool of reform for Zimbabwean education throughout this dissertation. Dialogue is a tool of democracy, and it requires active involvement in terms of commitment, taking risk, sharing ideas, and negotiating.

Mark Twain (1883) compares a river to democracy in his novel *Life on the Mississippi*. Both are continually changing and require negotiating perpetual forces. In this dissertation, I have not attempted to map out a course for that river of democratic education in Zimbabwe. Rather, I am proposing that engaging on such a journey is in the interest of those involved and of the nation.

Democracy means many things and operates on many levels. I am using the term of democratic processes to mean the promotion of more stakeholders' voices in a discourse of the substantive issues of the day.

It is easier for international organizations and governments to impose reforms than to get their hands dirty with the hard work of getting involved in a democratic change on the ground, that would be to risk having their toes stepped upon. However, there is great value in promoting such reforms. Through a more dialectic approach, stakeholders are forced to address the complexities of the issues. It is dealing with the complexities that leads to a deeper examination of the core issues. Each group is challenged to better understand the perspectives of others involved and question the ideals of their own; thus, issues are examined through many lenses. Through the dialectic process, ideas and ways of thinking are shared, and new possibilities are discovered.

The change may be slow, it may be muddled, but it can have a strong impact. Supporting and challenging one to be the protagonist in one's own life while collaborating with others is the goal. Ideally, through a dialogic process, people take control of their own lives by being involved in the process of improvement for all, and they gain better understandings of others.

The constructivist reform at Belvedere Technical Teachers' College provides an example of what a democratic reform looks like on the ground and the dialogue that resulted. Rather than having someone else explain what the reform is about and what it is supposed to do, those at the college decided those issues. As a result, meaningful discussions developed regarding the relationship

of the reform to the ideals of teaching and learning, thus leading to the substantive pedagogical issues of the day. Also, those involved have a responsibility to model the change they expect. As was the case with the CDS, lecturers who promoted the idea that research should be a process of deep thinking, had a challenge to engage in thoughtful dialogue with their students as well as other lecturers regarding the CDS.

This reform at BTTC was constructivist because it was the lecturers (and also should have been students) who determined what the CDS research project would be, how ideas of action research are applicable to it, and how the dialogue would ensue. Because the dialogue was inclusive and lecturers were willing to collaborate, the college was more prepared to address the key issues it faced. This reform is a model showing that a democratic process may get murky, but it is a way to involve those on the ground for positive change. If teachers are to be treated and expected to act as professionals and if students are to be respected and have their ideas valued, then democratic reforms need to be more used as a tool for addressing the needs of the nation.

Other Zimbabwean teacher education institutions could benefit from Belvedere's model of reform. In the current political-economic situation, many people feel powerless in being able to make significant improvements in teaching and learning in the country, let alone in their own lives. Action research and other democratic reforms on the ground show that the change does not have to begin on a large level. The modest changes in how the lecturers address the CDS and research in general, has fueled larger changes in the college; that is, a

spirit of collaboration and dialogue to develop new ideas. In *The Fifth Discipline*, Peter Senge (1990) argues that if one had a lever big enough, s/he could lift the world. The point being, many of the most significant transformations in the world have been brought on by important but relatively minor changes. The changes at BTTC in terms of the CDS began with lecturers talking and listening to each other.

As discussed in chapter three, there are three levels to engage in action research – technical, structural, and political – and the boundaries of each are blurred. A technical topic can easily expand to address structural and political concerns. A teacher-researcher needs to begin somewhere in the process. The starting point is not as important as the journey taken.

Developing a culture of constructing ideas and of negotiating communal standards through dialogue is a part of what Paulo Freire (1970) refers to as naming the world to be able to change it. For instance, lecturers at Belvedere Technical Teachers' College did not rely on the "experts" to tell them what the CDS is or should be. That was a dialogue that challenged previously conceived notions of what is appropriate research for student teachers. Describing the research that lecturers wanted from the students was the first step in making that standard of research the norm for the college.

Rather than viewing the act of creating knowledge as a process done from "above", teacher education institutions could model the process for their students who will become the nation's teachers. The hierarchical education system that Zimbabwe inherited from its colonial past remains with the challenge of preparing

its students to be active, constructivist thinkers. Perhaps the current government is not prepared to tolerate critical thinkers who identify the political implications of daily life on the larger national power structure. Even so, the need for individuals who are constructive thinkers, that is, able to develop personal ideas and independent ways of thinking, is important in addressing the needs of the country.

I am not suggesting that the critical thinking aspect is not important for the nation. Sub-Sahara Africa remains the slowest developing region in the world in spite of having many natural resources. There are many explanations for this, one of which relates to the region's power relationship with the rest of the world. In terms of political, economic, and cultural influence in world affairs, Sub-Saharan Africa has had marginal influence. Promoting constructivist and critical thinking throughout the population, will assist the citizenry to a) identify oppressive relationships (internally and externally) and b) be able to create new relations that are more beneficial to a wider population.

Promoting action research at Belvedere Technical Teachers' College was an important step in developing a dialogue of constructivist thinking. Successful dialogues do not end; they continually evolve. The direction of the one at BTTC depends on those who are included, the social/political/economic issues of the day, and the level of commitment. If those involved continue to be committed to examining the vital issues of the day, the dialogue will continue to be a tool in negotiating the ideals and complexities that will address those issues.

The Way Forward

I have minimized my role as an action researcher in this dissertation. As a collaborative research endeavor it has been difficult to distinguish my contributions from others' involved. To do so is contrary to the spirit of collaboration and community. Throughout this dissertation, I have conscientiously tried to provide a balance and comprehensive perspective of participants'/stakeholders' voices. However, there have been elements of my role as insider/outsider that have assisted in the changes at BTTC. By associating myself with BTTC and not the University of Zimbabwe or the Ministry of Higher Education and Technology, I was accepted as a fellow lecturer. Three and a half years of working, planning, and socializing with lecturers at the college has led to my understanding of what it means to be an insider at BTTC. On the other hand, I was the only non-Zimbabwean in the Professional Studies section, and having knowledge and experience with action research distinguished me from the others. In other situations, this knowledge could have been used to make me the "expert" who determines which ideas are valid and which ones are not. However, action research mitigates such a role. Because action research values the voices of those involved on the ground and because ideas are constructed through interaction with others, no one person plays the role of expert. The ideal of action research is that everyone involved becomes an expert in one way or another.

Within this context, my role took two forms – a facilitator and an advocate. In the former role, I played the "peace-maker." Prior to my arrival, lecturers from

various sections were openly hostile to the idea of being subservient to the PS section by being required to supervise CDS projects and then submitting marks to PS. While visiting sections and listening to lecturers' concerns, I stressed that the CDS project was a collaborative effort of all members of the college. It did not belong to PS any more than it belonged to the individual supervisor. It belonged with the student, and we all were working together to support and challenge all students to become effective and reflective teachers.

In workshops, I contributed to a focus on building a common vision of good research. This approach was to encourage dialogue rather than to distinguish between those who had knowledge of particular research methods and those who did not. Throughout my stay at BTTC, various group discussions focused on related issues such as: what is expected of students doing their CDS projects, what are elements of a good CDS project, what makes a decent topic, and how best to support students. While I did share my ideas on the issues in these discussions, I tried to promote a dialogue that reflected the views of those involved. It mattered little what I thought was the most appropriate way forward. The lecturers were the ones supporting, challenging, and evaluating the students doing their CDS. And they would continue doing so after I left. In a rare case of voiced persistence, I argued for a policy of requiring students to have a proposal completed prior to leaving the college for teaching practice. While I believed that it was important for students to have a clear picture of how they planned to approach their research, I was happy to see that the majority of lectures

disagreed with me. They argued that students needed to engage in participation-observations in the context prior to identifying a topic.

In my role as facilitator, I also shared data that I collected from the students and lecturers. In a sense, I became a "knowledge broker" bringing information I collected from my survey research about students' concerns, hopes, and expectations to lecturers, and vice-versa. Rather than attempting to use the data to make judgments, my purpose of sharing it was to create a starting point for discussions. "Are these genuine concerns?" was my opening question. Most often lecturers would quickly agree with the students' issues and move to a discussion of why this was the case and what we could do about it.

I also was an advocate. While every lecturer at the college had some involvement with the CDS, I was the only person who promoted the CDS as my primary focus. The lecturer-in-charge for PS had many other responsibilities. It was not feasible for that person also to organize workshops, edit the *CDS Guide*, and collect and present data, as well as perform the rest of his/her duties. It was a collective effort by a cadre of leaders that these things got done, but I provided continual encouragement. By promoting in the above-mentioned activities, I was advocating for the importance of the CDS as the center of a dialogue at the college.

The dialogue regarding the substantive pedagogical issues of the CDS has been established. Action research is a continuous process and it is my hope that it will continue to flourish without my personal involvement. For that to happen, more supports and challenges need to be addressed and be put in place

in order to institute changes taking place. Five possible strategies in support of this process include:

- producing the next edition of the CDS guide
- establishing a research support group for lecturers
- institutionalizing workshops on research throughout the college
- producing a journal for lecturers', teachers' and students' research
- creating working labs for students engaging in action research.

The second edition of the CDS guide was developed in 2003, three years after the first one. The changes were minor in the sense of the content. More examples were included as were more explanations of how to do specific research activities. The value of the second edition is that it signified that the process of thinking about and improving the CDS is continual. As a living document, my hope is that a third edition will be produced in the near future. With the mindset that there will always be a next edition, BTTC lecturers will read and use the current edition with a critical eye for improvement. Also, working collaboratively in making contributions and reviewing the guide creates a forum for meaningful dialogue and action.

Throughout my work at BTTC, many lecturers have indicated interest in engaging in research. Many have been conducting research projects through local and long-distance universities. A research support group of lecturers who share experiences, insights, and obstacles could go a long way in promoting a community of inquiry, which I have learned is critical for perpetuating reform. The group could elicit support and technical knowledge from local universities when needed. The establishment of such a group requires facilities and incentives. For example, lecturers need to be able to use a computer to print

their data to share with the group. In terms of incentives, more opportunities of further education and publication need to be available.

As mentioned in chapter six, the CDS workshops were a forum for dialogue, negotiation, and constructivist thinking. There is a need for workshops to be institutionalized so they are conducted at least once a year. They require much time, effort, and resources to organize. Supports need to be more readily available for the organizers.

As a researcher in Zimbabwe, I had attempted to publish articles in the two local educational journals. Upon submission, the process took several years for publication. Both journals are located at the University of Zimbabwe. I believe that BTTC could produce an educational journal that reflected practitioners' deep thinking about pedagogical issues and their attempts to make improvements. The journal would expand the dialogue of action research in Zimbabwe by inviting lecturers, teachers, and students to contribute. Again, such an endeavor requires much support and resources. Lecturers are already overloaded with duties and under-supported. Establishing and editing a journal requires a full-time position, and someone capable would need to be recruited.

Supports for students are also necessary. Other than those in computer studies section, students do not have access to computers to work on their research. Also, there is no resource center where students can go for assistance. A lab for students would help change the perception of students feeling like they are left to their own devises to sink or swim in doing their CDS research project.

As discussed earlier, action research promotes a democratic process. By democratic, I mean that it attempts to bring in voices of various stakeholders into the discourse. However, the context of the Zimbabwean education system is hierarchical. Many colonial power structures remain in place, such as the rigid adherence to the O' and A' level exam system and the many oversight bodies responsible for external assessments. Within this power structure, democratic processes can be co-opted. Examples include government forces and ruling party supporters intimidating voters and opposition party supporters, as well as threatening, kidnapping, and beating students and teachers because they are presumed to be critical of the Mugabe regime.

Even in this oppressive, national context, there were countervailing forces that challenge the hierarchy of power. Lecturers were willing to share ideas and admit lack of knowledge in particular areas. Auther posed questions and valued pupils' voices with minimal support from his mentor. And Patience was able to critically examine the schooling structure as unsupportive of progressive teaching methods.

Action research and its discourse can contribute to challenging the prevailing structures. As discussed in chapter three, there are three levels in which to engage in action research – technical, structural, and political. The first level examines a specific element in ones teaching and learning. While teaching is not a technical craft, there is much technical knowledge needed. It was on this level that most of the BTTC students engaged in action research. The second level addresses the structure of teaching and learning. Students at the college

indicated a desire for their classroom to be more "pupil-centered" and "interactive". At the third level, teachers make connections between the teaching and learning in their classroom with the larger socio-political context. Ideally, the research would transcend these levels. The technical aspects of one's teaching should challenge the structure of the classroom. For example, how a teacher poses questions to pupils could be a springboard into transforming the role of pupils' voices in the classroom. While the critical/political element was nonexistent in my research, I do think it could be a vital link in challenging power structures.

The city of Harare is brimming with people who are critical of the President and the ruling party; however, that examination could be directed to the structures on the micro-level. Blaming all problems – economic, political, social, and educational – on Robert Mugabe neglects the complexity of power relations. A teacher's examination of his/her role in the larger power structure context is a first step in being able to transform those structures. Auther valuing pupils' voices in his teaching and learning was an important step in challenging oppressive structures in his classroom that attempted to silence pupils. And through a dialect process with students and colleagues, Auther became more prepared to address the complexities of the issues in his classroom, many of which will be political in nature.

This process of developing a negotiated dialogue was rewarding, insightful, and fun; however, it was also a struggle. I have come to understand at a deeper level that struggle is a necessary element in the teaching/learning

process. The struggles existed on many levels – logistical/technical, structural, and political. In terms of logistics, the economic crisis of the nation made arranging meetings, making photocopies, and acquiring chalk a challenge. People spent much energy on daily survival concerns. For example, collecting a paycheck from the bank required standing in several queues over many hours and/or days. Often lecturers' spirits would be so dejected that discussing the CDS would be far in the recesses of their minds. On the structural level, lecturers had to struggle to find ways of transforming "lectures" into meaningful interactions with classes of as many as one hundred students. Reorganizing the CDS so that students took ownership of the process was a goal on the political level. Rather than accepting a hierarchy of knowledge, power to determine what is a good topic, appropriate research methods, and how to share findings was to be shared with the students. The supervisors who lacked the technical knowledge of conducting research were often resistant to share such power with the students. In the end, students received a mixed message about the power issues related to the CDS.

However, the struggle to produce critically reflective teachers also took place on an intellectual level. Changing perceptions of how research should be done required an open mind and a dialectic process that included various perspectives. I have learned that there is no one right way, but there are processes of posing questions, listening, thinking, trying, reflecting, discussing, and sharing that leads to a deeper understanding. This dialectic process does

involve much struggle, energy, and thought – which are essential to improving teaching and learning.

Action research is not the only reform that promotes this progressive agenda. However, it has gained momentum on a global scale as a way of addressing complexities of teaching and learning on the ground. I hope that the in-depth descriptions of action research at Belvedere Technical Teachers' College in Zimbabwe has contributed to the knowledge base, national, and international discourse of how to make teaching and learning more meaningful.

In spite of a national context of repression of divergent ideas, BTTC was able to develop a dialogue of substantial pedagogical issues. Parallel to the teacher in the classroom, it is important that the BTTC community critically examines its practice in terms of its role of challenging and perpetuating political relationships on the micro level. By promoting ideals of action research, lecturers are challenging traditional norms of hierarchy of power that are exploited by the ruling parting. Dialoguing, questioning and critically examining realities are tools necessary to put dictators in check. With the absence of a national dialogue regarding substantive pedagogical issues, it is up to teacher colleges like Belvedere to take the lead in promoting such a discourse.

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APPENDIX A

Model Topics Developed by Subject Area Sections

	1st step – start with an issue (based on/or related to a real problem)	2nd step – focus the issue to a specific problem (theorize/make hypothesis regarding • Why the problem exists • What is the crux of the problem • Which aspect of the problem is indicative of the larger picture)	3rd step – identify possible ways to address problem and narrow to one or two (What can the teacher do?)	4th step – possible research approaches*	5th step – possible theories to come out of research†
*Then the student teacher is to investigate how effective the technique is and how to make it more effective. † Student develops own ideas such as: why it worked (or didn't work) with this particular group, when it should work and why, when it most likely won't work and why?					
Technical Graphics	#37 – "Pupils having difficulties in visualizing / thinking abstract" (This is a real problem but still vague)	Pupils not understanding the relationship between 3 dimensional and 2 dimensional presentations of drawings (To make the problem more focused) There is a need to compare and investigate the problem, e.g., are there differences in learning concepts in 2 and 3 dimensions?	Use learning aids (This solution is vague) Using real objects, i.e., having pupils make a model and then draw the model		
Wood Tech	#52 – "Poor performance in Woodwork theory" (Too many students use this topic – it is too general/broad)	Time/teacher/exposure/background/too abstract/group ignored/lack of textbooks/ attitudes of students and parents (Many reasons why – need to narrow)	Highlight concept with fieldtrips in industry; construct a project that focuses on theory aspect; more emphasis on the introduction of the concept; more time for preparation		

PADE	#149 – "Problems in calculating math problems" (The problem is real, but needs to be focused)	Looking at ratios of fertilizer for a set area	- Revisit basic math skills - Liaise with math department to team teach - Students paired to discuss/work out math problems - Give more time to work solutions - Make real – problematize a practical problem, e.g. students determine amount of fertilizer for own plot		
Computer Studies	#281 – "Ways of instilling discipline in the computer lab" (It's good because it is appropriate for the age group and there is a real problem of pupils playing around)	Students not adhering to the rules *(How is discipline a problem?)*	Pupils wrote their own regulations with discussions and put them into reality		(Theory) students ownership of rules.
	#251 – "Group work" (Shortage of computers is a real problem)	Students are not effectively sharing computers *(Why is group work a problem?)*	a) monitor time and group on computers, b) different teaching approach, i.e. discovery, c) organize groups with specific tasks and specific roles for each member. (How to make group work more effective)		
Hotel and Catering	#288 – "Integration of modern and traditional equipment in schools" (This is a real problem – some schools have traditional equipment but it is not used)	Way of thinking/attitudes need to change (Why traditional equipment not used)	Demonstration with traditional equipment, compare results, discussion of advantages and disadvantages, focus on the skills of cooking. In schools that do not have any equipment, students could make tradition equipment, e.g. Dutch oven, iron pots in fire pits		
Clothing & Tex.	#49 – "Problems faced in handiworked button holes" (A good problem – it is focused)	Making a handiwork button hole requires a particular skill, i.e. button hole stitch versus blanket stitch – a certain loop/knot is required and student confuse the stitches (Why the problem exists)	Have students use thick fabric/thread/material (e.g. wool) or different color threads to learn the knot		

Building Tech	#40 – "Management of practical lessons" (Too general)	a) time being wasted - Time too short b) skills not mastered (A particular skill) plumbing/ walls not up right – (reasons) 1) tools need servicing or 2) lack of skills reading instruments. (What is the problem)	A) Organize preparation, delegate responsibility B) Practice on several walls, students do own assessment/marking own and justify, emphasize skill with demonstration		
Mec. Engineering	#51 – "How best learners can be assisted in coping up with illustrative graphic communication" (It is not a problem)	Students find it difficult to understand/interpret 2 dimensional into 3 dimensional objects (real problem)	Students produce models out of paper, teacher shows original object/has pupils sketch it/and then make the object from the sketch (conversion/projection).		
Geography	Pupils have troubles with contour maps	Pupils having difficulties distinguishing between real life and two dimensional in terms of contour lines, e.g. confusing spur and valley.	Have pupils construct a 3 dimensional map that show the change in elevation		

APPENDIX B

Dialogue Report on CDS Progress Form and Description

Dialogue Report on CDS Progress
During Teaching Practice
Belvedere Technical Teachers' College

Student _____ CDS Personal Tutor _____

School _____ Section/Year _____ Date _____

Subject _____ Class being researched _____

Topic _____

Description of Progress to Date _____

_____

_____

Nature of Difficulties _____

_____

_____

Nature of Assistance Needed _____

_____

_____

Suggestions Agreed Upon _____

_____

_____

Further Remarks _____

_____

Signature of Student _____ Name/Signature of Visiting Tutor _____

Indicate Student's Progress (tick the appropriate box)

- o Student is meeting all expectations and research is Progressing well
- o Student is meeting most expectations and research is on track
- o Student has begun the research but needs to proceed with more diligence
- o Student's work thus far is inadequate

(Use the back if additional space is needed)

Dialogue Report on CDS Progress
During Teaching Practice
Belvedere Technical Teachers' College

Directions: While the visiting tutor and the student dialogues about CDS Progress, the tutor/supervisor completes the form in duplicate. The students will remain with the original. The copy is to be returned to the Teaching Practice Office where it will be given to the student's personal tutor for CDS. A Dialogue Report is completed each time a student is supervised during teaching practice.

Use the back of the form, if there is not enough space for comments.

The tutor is not to impose his/her views on the students. The CDS research project belongs to the student – not the tutor. If the student can justify what s/he is doing, s/he should be encouraged to follow suit. If the tutor does not believe that the student's research is reasonable, s/he should make a follow-up meeting with the student's CDS Personal Tutor to inform him/her of the concern.

Description of Key Issues:

Description of Progress to Date: The student is to describe how far s/he has gotten with the research, i.e. what s/he has done and attempted to do thus far.

Nature of Difficulties: The student is to discuss problems they have come across – what they are, how they dealt with them, how they are thinking of addressing them, etc.

Nature of Assistance Needed: Discussing together, the student and tutor figure out what assistance/help the student needs. The tutor should not feel as though s/he has to have all the answers for the student. Identifying what help the student needs and how to get it would be more useful.

Suggestions Agreed Upon: Through dialogue, the student and tutor should agree on ways forward for the research to progress. If major changes are needed for the research, it is appropriate to suggest that the student has a face-to-face dialogue with his/her personal tutor.

Further Remarks: Any additional comments the tutor or the student wishes to make.

Rationale: The purpose of this endeavor is to promote dialogue between the student and visiting tutor/supervisor. Thus, the priority is on assisting the students – supporting and challenging them to think deeply about their research and to move forward. This is not an evaluating or assessment exercise.

In the past students have indicated that no one enquired as to their progress in conducting research in general (including furthering developing a topic, collecting data, and beginning the analysis and write-up) during teaching practice. As a result, several students returned to college without data collected and some without a research question. The Dialogue Report is to challenge and support students to engage in research practices from the beginning and throughout teaching practice and to identify possible problems early enough to be rectified effectively.

The CDS is a college-wide assignment that involves all sections. The goal for the CDS is for students to think deeply about the teaching and learning that is happening in their classrooms. The research should be seen as a tool in assisting students in becoming effective teachers, i.e. developing their ability to reflect on their practice. While students are conducting their teaching practice, they are the responsibility of the whole college – not one section or one supervisor. Even without knowledge of a particular content area, visiting tutors/supervisors should be able to engage students in a dialogue about their progress.