CHAPTER 7
CYCLE 2 - INTRODUCING CHANGES

7.1 Introduction
During and after the implementation of cycle one I spent much time monitoring, deliberating and reflecting on my experiences in the classroom and on the wider context of the school as a whole. As the cycle progressed I began to realise that although the learners had responded very positively to my teaching style and also to me as a person and a teacher, there were significant deeper influences within themselves and wider outside forces, undercurrents and pressures that were impacting on the classroom situation and my study. This was true for the general school environment, their experiences in other classes as well as the collective circumstances they encountered outside the school. I was pleased with the progress I had made in the classroom and with the learners but realised that without addressing the powerful surrounding concerns that were impinging on my sanctuary the going would get increasingly tough. This daunting task however did not dampen my spirits and I planned eagerly what aspects of cycle one I would keep and what changes I would make in cycle two.

7.2 The planning of cycle two (P2)
7.2.1 The model for Cycle two
The findings of cycle one provided the source for the planning of cycle two. When designing this cycle careful consideration was given to the lessons learnt and conclusions drawn from cycle one. In contemplating and developing this new cycle an incremental approach was used to address the issues. In other words the general approach used in cycle one was maintained but new elements were also added.

Figure 7.1 shows that, as with cycle one, this cycle incorporated three phases - a planning phase (P2), an implementation phase (I2) over a period of 31 teaching days and finally an evaluation phase (E2).

In analysing the evaluation of cycle one and designing a revised general plan for cycle two the following categories and principles needed attention.

CYCLE 2
ENVIRONMENTAL INFLUENCES

PLANNING (P2)

CYCLE 1 EVALUATION REVISED GENERAL PLAN
(E2) (Replace this page with Special Page: Page 208)

IMPLEMENTATION (I2)

ENVIRONMENTAL INFLUENCES

Elements of methodology used:
* Demonstration
* Explanation
* Cognitive questioning
* Equipment
* Worksheets
* Cooperative learning

Figure 7.1 Model of Cycle 2

1. If I wanted the classroom milieu to improve the general circumstances of the school would
have to do so.

2. I would need to develop ways of maintaining and deepening the trust between the learners and myself. I realised that trust, belief and confidence in me as a person and a teacher was crucial to any successful classroom interactions.

3. I would have to extend my methodology to include ways of increasing the pool of English available to individual learners, to bring the science equipment closer to them and to provide more opportunities for communal thought and discussion so that more challenging cognitive and creative thought could be undertaken.

4. I would need to develop creative ways of dealing with the impulsive, egocentric, fiercely competitive and often disruptive behaviour that at times accompanied the lessons. To achieve this I would need to further attempt to create a classroom climate of safety, trust, acceptance, limits and a sense of purpose (Rockwell, 1993).

7.2.2 More detailed plans for Cycle two

*School contextual issues:*

It has often been shown that the school represents a social arena where adolescents develop personal beliefs, educational and occupational goals (Skinner, 1987). The quality of school life also has a strong influence on the general sense of student well being and is determined by the educational experiences and student involvement in school life and engagement in the school environment (Karatzias, Power, Flemming, Lennan & Swanson 2002). With this in mind it was necessary for me to become more involved in the more general aspects of school life.

In order to improve the general school situation and the circumstances in the other classes, I needed to spend more time helping the principal to establish and maintain a more acceptable code of conduct in the school as a whole, help to organise more and better learner and teacher resources, keep a relevant timetable running smoothly but also, together with the school counsellor, create time for all the staff to share our experiences and findings with each other. It was also vital to listen carefully and objectively to the needs and aspirations of the learners. Through these discussions we as staff could adopt a policy of best practice and act as a mutual professional, psychological and emotional support base for each other. Regular staff development workshops and seminars were needed to accomplish this.
Building and maintaining trust and motivation

Because the student centred approach to classroom interpersonal relationships had been so successful I decided to continue with this approach. I would also continue with the use of intrinsic rewards such as praise, encouragement and reassurance as well as the extrinsic motivational rewards I had used in cycle one. I soon realised in cycle one that using the many spontaneous situations which arose naturally in class to connect with and establish a rapport with the learners, was of more value than a pre-thought out system. I would also continue using the successful approach of combining humour, repeated private explanations, physical contact and the recognition of and sensitivity to individual needs.

Practical issues

I decided to continue to combine a broad and narrow spectrum approach. Throughout the cycle, while I taught them Science and Mathematics, I used a broad spectrum approach of observation, and data gathering to the grade 7, 8, 9 and 10 grades. However with the Science teaching of grade 7 and especially grade 8 I chose, because of the unique, difficult and challenging nature of the classes, to augment and intensify this broad approach. I combined the broad spectrum approach with more focussed observation and data gathering methods.

The time table would remain the same as in cycle one.

The syllabus content used during cycle two

Because of the general deprivation and the success of the experiment of using the same syllabus content for grade 7 and 8 and the same for grades 9 and 10, I decided to continue with this system. Also as a result of the increased pace of the grade 9 and 10 classes and their consistent request for what they called “real” mathematics, I decided during this cycle to listen to their appeal and to introduce the basics of algebra and geometry with them. With the grade 7 and 8 classes I continued with the reconstruction of basic arithmetical and geometrical concepts.

With regard to the Science syllabus for grades 7 and 8 I decided to deal with Magnetism as I had always found that its almost magical quality fascinated learners of this age. This topic also seemed to flow naturally from the concept of Force that I had just completed and was ideally suited to the methodology I intended to introduce. I divided this area of study into the following
seven lessons:

Lesson 1: The property of attraction. Magnetic and non-magnetic substances.
Magnets can attract magnetic substances from a distance. Magnets can attract magnetic substances through non-magnetic substances.

Lesson 2: The poles of the magnet have the strongest attraction.

Lesson 3: A magnet has a direction finding property. A magnet has a North and South pole.

Lesson 4: The law of magnetic poles

Lesson 5: Magnetic Fields and Lines of Force

Lesson 6: Magnetic Induction

Lesson 7: Permanent and temporary magnets. How to make a magnet.

To the content, language, cognitive and personal intentionalities mentioned in chapter six, I decided to consciously include social intentionalities such as cooperation, compromise, negotiation, trust and leadership as well. These would fit in well with the intended co-operative learning methodology and my intention to deepen their understanding of mutual trust between themselves, their peers and me.

**The methodology used during cycle two**

Because of the positive response to and participation in it, I decided to continue with the cognitive questioning aspect of cycle one, especially when revising previous lessons and hooking the pupils into new topics and concepts. I believed that with increasing confidence, pupils would be prepared to use and risk their limited English ability more and more. This would also continue to provide me with opportunities to extend and challenge their thinking and gain some insight into their understanding. I decided that when asking questions I would encourage the pupils to respond and express their ideas in sentences and not in just conceptual words and phrases. In this way I hoped to develop their English ability further. However, because of the introduction of cooperative learning, the time devoted to cognitive questioning would be reduced.

Slavin (1996) summarises the strong literature that suggests the benefits to students of group based learning. Vygotsky (1978) states that there are clear cognitive advantages to establishing group based learning environments and King (1997) points out the metacognitive benefits as a means of facilitating higher order learning. Diaute, C.; Hartup, W.; Sholl, W. and Zajac, R.
(1993) have shown that literacy learning, both verbal and written, can occur in the context of social and peer relationships. In her research, Kirk (1997, p. 8) came to the conclusion that cooperative work produced results that “show a strong positive pattern of behaviours, feelings and abilities.” Kirk (1997, p. 8) also states that: “cooperative learning has the capacity to promote consideration of and sensitivity to the views of others and cultivate such social values as respect for and enthusiasm to help others.”

In an attempt to overcome some of the language, cooperation, egocentric and trust issues I decided to introduce cooperative learning. By using groups I hoped to increase the reservoir of English available to individuals, both for the answering of questions and the completion of the worksheets. I also believed that the pool of combined experience would have the positive effect of generating more creative ideas and responses to cognitively demanding questions and tasks. In designing the introduction and practice of cooperative learning I made use of many of the ideas on the subject as proposed by Johnson and Johnson, (1986) and Barnes and Todd (1977).

During the initial investigation of concepts in groups, I would encouraged the boys to communicate with each other in the language of their choice. This allowed the learners to develop an understanding of the concepts being studied before applying scientific English labels to them. If words in the language of choice were not available words from other languages could be substituted. Once the issues had been discussed and answers to tasks agreed upon, the “talkers” were asked to communicate their findings to the teacher and class in English. The worksheets would also be completed in English. I believed that peer support and shared responsibility would also help in providing individuals with the confidence needed to risk the groups’ responses rather than being wrong or right on their own. However, individual accountability would still be a high priority.

I decided to use groups of three to five as this would provide ample opportunity for all to participate in the group roles. I decided to use mixed ability groups because I wanted to exclude the problem of exclusivity and ability labelling with all the negative affects of self-fulfilling prophesies. I based the grouping of the learners according to ability on the test results received at the end of cycle one. The groups were formed by pushing three double tables together.
Four roles were allocated and explained to the individuals in the groups. They were applied on a rotational basis. The roles changed at the end of each lesson. This was done to expose all the learners to the different roles and to prevent domination and withdrawal by individual group members. I chose four roles because of the number of learners in each group and because they suited what had to be done in the lessons. The practical application of these roles can be found later in this chapter. The functions of the roles were as follows:

- **Leader** - to control the group, to make sure everybody contributed, to make sure there were no “hitch hikers”.
- **Talker** - to feed back the findings of the group, to answer with the group’s response to a question.
- **Writer** - to fill in the worksheets with the group’s responses.
- **Worker** - to collect, work with and return the equipment.

Each group was provided with equipment to carry out the investigations. This meant that the apparatus used in the lessons was handled by all and not only me. This concrete manipulation of the apparatus by the learners, I believed, would strengthen their understanding.

Conceptual understanding would also be extended and opportunities for individual and communal thought created by providing groups with cognitively demanding tasks. Worksheets were retained and formed the basis for the conceptual development through the use of guiding questions and tasks. The following format was used. First, a question concerned with an aspect of a concept would be asked. i.e. Which substances are attracted by a magnet? Then a method of finding an answer to this question would be suggested. Observations would be recorded systematically and deductions and summary statements included. The concepts would then be transferred, applied and problematised into other situations to consolidate and check understanding. Finally to improve their English, any new vocabulary encountered would be collected. I include some examples of this process from worksheets used in this cycle as Attachment 7A in the Appendix.

After the groups had completed the tasks, recorded their observations and findings and had fed back their conclusions and answers to the class, I marked the writer’s copy and the rest of the group then completed their own worksheets with the corrected responses. This ensured correct
notes for study purposes.

While the learners were busy working in groups I circulated to make sure they were progressing in the right way, I helped solve dominant and withdrawal problems of group members, provided language where necessary, made sure the roles were functioning and extended and transferred the concepts by asking pertinent and leading questions. Apart from these methods I also incorporated the more traditional methods of explanation, description and demonstration where necessary and needed.

Data collection techniques used during cycle two

I decided to continue to use most of the same data collection methods described in cycle one. These were:

- Classroom observation while teaching.
- Field notes
- A diary
- Miscellaneous documents
- Written achievement tests
- Video recordings of lessons and written analysis of lessons.
- Triangulation of a random lesson.

However to these would be added the following methods:

Learner interviews:

Because of the difficulty the learners found in expressing themselves in writing when confronted with the open questions in the learner questionnaire at the end of cycle one, I decided to conduct individual verbal learner interviews with random selected learners in grades 7 and 8. In designing these interviews I made use of many of Mason’s (1996) and Creswell’s (1998) ideas on qualitative interviewing. To depersonalise the interview situation and in an attempt to access more authentic views, opinions and perceptions I asked the school counsellor to select the learners and carry out the interviews. Three questions were put to each of the six selected learners. They were:

1. What kind of person and teacher do you find Mickey to be?
2. What is it like to be in his class?
3. What do you think about the way he teaches you?

Permission to audio tape record the interviews was requested and received. After completion of the interviews they were transcribed and a thematic analysis done.

*Group and individual worksheets:*

Group worksheets completed by the writer in each group and controlled by me provided a useful and interesting insight into the level of understanding, the problem solving attempts of the group and its individuals. They also gave me insight into the level of their combined English.

*Teacher questionnaires:*

In order to obtain a wider perspective on the teaching of the learners I decided to ask a random selection of teachers at the school to voluntarily complete a written questionnaire for me based on guidelines found in Creswell (1998). Five of them obliged. The questionnaire consisted of four open ended questions. They were:

1. What kind of person is needed to teach our street children?
2. What kind of school and classroom atmosphere and environment is needed to teach these children well?
3. What kind of teaching methods do you think work best with these children?
4. What do you find makes teaching street children difficult?

I conducted a thematic analysis of their written replies to the questions.

*The June examinations:*

As further evidence of conceptual understanding, recall and motivation I decided to use the results that the learners obtained in the June examinations.

Table 7.1 provides a summary of these data collection methods.

### 7.3 The implementation of Cycle 2 (I2)

#### 7.3.1 Duration

The implementation of cycle two covered a period of 31 teaching days. It began on 12 May 2002 and ended on 2002:06:08. This period also included the June school holidays.
7.3.2 Syllabus, time table and venue

In terms of the Science and Mathematics during the implementation phase I covered the syllabus and content areas as mentioned in the planning phase.

<table>
<thead>
<tr>
<th>No</th>
<th>Data source</th>
<th>Grades</th>
<th>Remarks</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Observation while teaching</td>
<td>7,8,9 &amp; 10</td>
<td>Done during presentation of lessons</td>
<td>2002:05:13 TO 2002:07:29</td>
</tr>
<tr>
<td>2</td>
<td>Field notes</td>
<td>7,8,9 &amp; 10</td>
<td>Done before, during and after lessons.</td>
<td>2002:05:13 to 2002:07:29</td>
</tr>
<tr>
<td>3</td>
<td>Diary</td>
<td>7,8,9 &amp; 10</td>
<td>Written up daily.</td>
<td>2002:05:13 to 2002:07:29</td>
</tr>
<tr>
<td>5</td>
<td>Classroom observation</td>
<td>8</td>
<td>Triangulated by competent observer</td>
<td>2002:05:28</td>
</tr>
<tr>
<td>6</td>
<td>Video - classroom analysis</td>
<td>8</td>
<td>6 video taped lessons on Magnetism</td>
<td>2002:05:17 to 2002:05:31</td>
</tr>
<tr>
<td>7</td>
<td>Written cycle test 2</td>
<td>7 &amp; 8</td>
<td>Test on magnetism</td>
<td>2002:07:26</td>
</tr>
<tr>
<td>8</td>
<td>Learner interviews</td>
<td>7 &amp; 8</td>
<td>Conducted and Audio taped by School counsellor</td>
<td>2002:05:31</td>
</tr>
<tr>
<td>9</td>
<td>Teacher questionnaires</td>
<td></td>
<td>Completed by principal and 4 teachers</td>
<td>2002:05:31</td>
</tr>
<tr>
<td>10</td>
<td>June examinations</td>
<td>7,8,9 &amp; 10</td>
<td>Results for Science and Mathematics</td>
<td>2002:06: 10</td>
</tr>
<tr>
<td>11</td>
<td>Worksheets</td>
<td>7 &amp; 8</td>
<td>Include individual and group worksheets</td>
<td>2002:05:17 to 2002:07:24</td>
</tr>
</tbody>
</table>

Table 7.1 Summary of data collection methods for Cycle 2

I also continued to use the extrinsic cumulative motivation system of stars and rewards of different kinds as it was especially suitable and applicable to the ongoing nature of work tasks done by the learners in Mathematics.

During this time the voluntary staff stabilised to a certain degree and so the timetable remained relatively stable. The large carpeted classroom was especially suitable for conducting and video taping the specially selected Science cooperative learning lessons. These six lessons were taught to the grade 7 and 8 classes but only the grade 8 lessons were recorded on video for later analysis.
The flow of the implementation of this cycle can be found in Attachment 7B in the Appendix.

7.4 Evaluation of Cycle two (E2)

I used a similar system to evaluate and analyse this cycle as I did in cycle one. Added new and useful sources of data in this cycle were the learner interviews, teacher questionnaires and the June examinations. Overall the results of the classroom actions I had taken in this cycle were encouraging but outside school and environmental contextual considerations continued to have their dampening effect. Active participation in lessons increased substantially due to the predominantly cooperative format, the increased social support and the greater English resource available in the groups. On the other hand getting the learners to operate effectively and productively in groups proved to be much more difficult than I anticipated. The following were the main issues which emerged out of the analysis of this cycle. Again I will separate the wider contextual themes from the narrower classroom ones.

7.4.1 The contextual issues which impacted on the learners

7.4.1.1 School organization

Past research has shown that high levels of school satisfaction are linked positively with commitment to school (Goodenow & Grady, 1992), higher motivation towards learning (Keys & Fernandes, 1993) and decreased levels of school drop-outs (Okun, Kardish and Janiga, 1986). Research has also shown that lower levels of school satisfaction have been negatively associated with behavioural problems, poor school achievement (Baker, 1998) and school alienation (Fine, 1986).

With three months of experience behind us we at Masupatsela had learnt some valuable lessons. As will be seen from my later analysis the learners’ general behaviour displayed a marked negative change during this cycle. The causes of this phenomenon were many and varied. The slow unfolding of the school had not met their expectations and many of the volunteer teachers were not experienced, trained and competent enough or had the necessary strength of personal presence to deal with the increasing aggressive and disruptive behaviour. Because promised funding did not materialise teaching and learning resources were slow in arriving. This frustrated the learners. The expected take over of the school with its financial benefits by the Education Department dragged disappointingly on. Anticipated salary hopes for the volunteer teachers were dashed over and over and the token incentive of R260 a month to cover their travel did little to
assuage them. Furthermore the grinding atmosphere of confrontation wore the them down insidiously to feelings and acts of anger, frustration, resignation, abdication, desperation, surrender and finally capitulation. Garratt, Roche and Tucker (1997) state clearly that a key factor when working with young troubled people facing multiple disadvantages are staff members with excellent skills, expertise, training and strong motivation. This was not the case at Masupatsela. The prevailing atmosphere and undercurrent in the school was one of a charged and brewing culture of dissatisfaction with both staff and learners. Exactly the reverse of what was needed or planned.

In establishing and maintaining a programme for disadvantaged children such as those at Masupatsela one of the cardinal concepts as expressed in the literature is that of learner participation in its design and implementation. Ennew (1994) states clearly that not only are the children capable and resourceful but their feelings and opinions must be respected if they are to buy into the programme. She is also of the opinion that the children are the best resource for finding solutions for problems which involve them. Swart (1990) says that only when the learners are convinced of the project’s authenticity will they commit themselves to it. This should be kept in mind when working with children and providing them with programmes which can help them to develop positive strategies that can enhance their growth. Foley (1983) contends that often measures taken unilaterally to resolve school problems may easily worsen relationships between educators and the children.

Unfortunately the response from the school to the disruptive and confrontational learner conduct did not take heed of this advice. One sided practical rules and actions were taken which dealt rather with the symptoms than the root causes of learner dissatisfaction and disappointment. Many of these measures created and imposed further restrictions, checks, controls and constraints on the learners and created a perception of restraint and confinement. On the surface they kept the learners on the school premises and in classrooms but on a deeper level just fuelled the growing discontent, underlying unrest and disquiet and soured the teacher/learner relationships as Foley had predicted. Some of these measures were:

- The gate of the school was locked between the beginning and end of school. Learners who arrived late were sent home. The security guard was advised only to allow learners to leave the school after presenting a signed note from the principal. This was introduced
to prevent late coming, early home going and bunking during the day.

- Toilets were locked except for breaks. Learners had to get a permission note from the teacher and one from the principal to get the key for the toilet during class time. This was introduced to stop the habit of roaming and skipping class.
- The last period of the day was shortened and the period before second break lengthened. This was done to provide more optimum teaching time because the last period was never taken seriously by the learners and many used every trick they knew to miss the class.
- The arrangement that the learners change between periods was replaced by one where the teachers changed instead. This was designed to prevent much of the milling around and time wasting between periods, late coming, going to the toilets for extended periods for get togethers, bunking and leaving school without permission and to reduce the general noise level in the school.
- The principal introduced some hard line policies with regard to certain issues like the smoking of dagga, repeated serious misbehaviour and continuous absenteeism. Students were asked to leave for repeated offenses of this nature (Diary 4:06:2002, p. 41).

On the other hand some of the other changes and introductions which had more positive affects on the situation were:

- The voluntary staff situation stabilised. There was less of a turnover and this resulted in a more permanent and durable timetable. This made the learners more restful, settled, accepting and understanding.
- Text books for all classes arrived and were handed out. This lent a sense of authenticity and seriousness to the school which the learners appreciated.
- Opportunities were made at staff meetings for teachers to share their emotions, feelings, worries, experiences and frustrations. This provided them with an escape valve for tensions, stress, anxiety and worry experienced in the classroom and school.
- The school counsellor introduced a number of psychological interventions with different groups and classes. The purpose was to help the learners to understand themselves and their behaviours. They were also conducted to encourage the learners to adjust their negative behaviours such as bickering, fighting, teasing and the cruel jokes they played each other to more positive adult alternatives. These programmes can be found in Magdel Harper (2003).
In general I gained the impression that during this time the approach at the school was more a case of tightening the lid on the pressure cooker than dealing with the fundamental conditions causing the problem. A more balanced and meaningful curriculum was needed - one based on the combined visions of the staff and learners. Practical skills development was desperately needed to provide a future hope of work and income for the learners and a more comprehensive and organised sporting and cultural programme required to absorb and refocus all the negative energy that was directed at disruption and confrontation. The problem lay with money. The enthusiasm and commitment of the person who had been the driving force behind the establishment of the school and had undertaken the fundraising function for it began to fade. This in tandem with the fact that the organization, under whose auspices the school was being run, failed to come up with any meaningful contributions, resulted in a dearth of funds. In simple terms the school did not have the cash to achieve the goals it knew were vital for its success and survival and so had to guddle and limp along to the frustration of all.

7.4.1.2 School enrollment and attendance
Throughout this cycle there was a slow but steady haemorrhaging of the original learners. Over a period of time the last of those who stayed on the streets and in the flats failed to arrive at school - probably too exhausted, disillusioned or seduced by the temptations, pleasures and freedom of the street to maintain the effort to continue their education.

The greatest attrition occurred after school holidays. The worst happened after the June vacation. During this time many of the children in the shelters and who stayed privately went home and either did not return or often did so as changed people. While away from their regular homes during the term many different experiences must have happened to them to affect them in this way. I quote a paragraph from my diary found on the 29 July 2002:

“During the holidays obviously a number of different things happened to affect them in this way. W is more impossible than ever - extremely difficult now to get to concentrate. J is away in his head somewhere after the uncertainty of the pregnancies of his girlfriends, worry over a theft he had committed and persistent substance abuse. S and P come and go as the whim takes them and G’s attendance has become very erratic. SE
has been arrested for possessing a huge knife and M, P and A have disappeared without trace. The problem is that the circumstances of the children change so rapidly in such basic, violent or depraved ways that gains with them that have been painstakingly built up over months can evaporate overnight. Their behaviour, ability and willingness to concentrate and learn, as a result of these serious events can change from day to day” (Diary 29:07:2002, p. 43).

During this cycle and especially as the winter became more severe attendance also became more erratic and skipping class endemic. Worst hit was the grade 8 class where on some days my attendance register shows only half of the class was present. This infrequent attendance created problems for the cooperative learning methodology I was using because I could not maintain stable groups both in number and composition and made the rotation of roles within the group problematic. The fluid situation with regard to attendance was extremely frustrating, annoying and demotivating for me. The lack of stability and consistency of attendance and the continual arrival and departure of learners was devastating on the ability to teach with any sense of pace and momentum. The amount of material that could be covered therefore was considerably diminished and much less than my experience in mainstream schools. In many cases the irregular attendance resulted in me having to teach the same content over and over to individual learners. Exacerbating this situation was the problem of increasing late coming for classes. I decided to put the problem to the classes. Their solution was straightforward - just lock them out. Then I explained that the problem was not that simple. Some came late because of legitimate transport problems and others because of laziness or naughtiness or defiance. How was I to tell the difference? They acknowledged the problem but could not suggest a suitable and workable solution. This dilemma was symptomatic of disciplinary issues in the school. The problems were always clouded in and confusing emotions, grey areas of uncertainty, a plethora of plausible stories and excuses and the twisting and distorting of the situation by the learners to create a favourable face. Maintaining an understanding and empathetic position and approach often tested my patience and self-control to the limit. However cycle one had taught me an excellent and valuable lesson. Anger and shouting very seldom achieved any positive or desired effect. The boys were impervious to it and reacted to it with a similar response. Instead I found a calm, logical and rational approach achieved far better results. Finally, concerning this late coming and skipping of classes I include a wry piece of humour from my diary of 22:05:2002:
“After second break only five grade 8's arrive back in class. I am told that the others have skipped class and left to “stroll.” When I inquire what this means I am told that they have either gone to walk around the streets or go up to the cafe near the station where they can watch videos of naked women and porn films with drinkers and pool players. How can they possibly enjoy this more than my lesson on magnetism!” (Diary 22:05:2002, p. 34).

In establishing and running a school such as Masupatsela the dynamics of enrollment need to be considered carefully. This is valid for both quantity and other sensitive and volatile issues such as ethnicity, sex, age and race. First, when class size reached more than fifteen I found it very difficult and gruelling to provide the individual attention that children with their amount of academic deprivation and behavioural issues demanded. The personal energy that they craved, commanded and claimed from me was so continual, draining and debilitating that on arrival at home after a day at school I was jaded and exhausted. Second, one must be very weary of disturbing the existing enrollment balance at the school. The following incident will illustrate this point. On Thursday 16 May the principal decided to admit about four new white children to the school. Up to this point only two other white children were at the school. They had been part of the original enrollment and were accepted by the rest of the boys without reservation. The histories of the new white children were not very encouraging either. They had been thrown out of just about everywhere they had attended and daunting reputations followed them. Their brooding natures, morose dispositions and darting eyes and the suspicion with which they were received by the other boys in my class, also raised alarm bells of an impending racial conflict. My diary of 20 May 2002 records that my instincts were not wrong.

“Well it took two days for the tension of the racial situation to explode. All hell broke loose after assembly and break. A violent fight erupted between the new white boys and the old established black groups. This was an outcome of what had happened over the weekend. Apparently these new boys stole S’s shoes at the Brooklyn Mall and caused a full on confrontation there.”

Again this was evidence of the thin veneer of anger, tension, volatility, instability and explosiveness that simmered just beneath the surface in the school.
7.4.1.3 Outside influences
As May lengthened and June approached the cold of the highveld winter began to bite into the attendance situation and the tendency to come late for class increased. Arriving late was especially bad at the beginning of school and after break times when the warmth of the sun on the comfort of the garden benches around the school proved extremely seductive. The lack of warm clothing also had the effect of children avoiding certain of the classrooms which were in shadow and therefore particularly cold.

Hunger, lack of sleep, illness and the preoccupation with their own thoughts also continued to affect the participation levels especially in the group work when those who suffered from these were not directly involved in the roles of leader or writer. In fact as this cycle progressed food as a powerful motivating factor became very evident. When questioned about this many said that hunger for so long had been a constant and frightening companion. For someone like me where the availability of food was always plentiful and taken for granted this proved to be a humbling and sobering realization.

Finally, the negative effect of the public’s perceptions of the boys continued to play itself out as they came into contact with the outside world. According to Swart (1990b) street children live under a constant threat of maltreatment and violence from the public. Many people believe that by maltreating these children they will go elsewhere. Apteker (1988) offers a number of reasons for the public’s hostility towards street children. First they are treated as a whole thus depersonalizing their plight. In most cases the only contact many people have with them is when they are asked repeatedly and irritatingly for money at traffic lights or when shopping. This leads to harsh and negative opinions being formed of them. In addition much of the information obtained by the public comes from the press which tends to sensationalise their worst behaviours. As evidence that these attitudes are prevalent in central Pretoria I include a story from my diary of 28 May 2002.

“We had an incident at a well known fast food outlet on Monday. R, one of the teachers, took two of the boys for hamburgers as a reward and incentive for good work. The boys were chased away by the manager and the security guard because as they said: “That kind of boy was not wanted in the shop because other people don’t want them there.”
school management visited the operations manager of the chain with the result that hamburgers for the whole class were delivered the next day to say “sorry.”

Championing the cause and rights of street children like in this instance is an important and effective way of winning their trust.

7.4.2 The classroom issues which impacted on the study
7.4.2.1 Learner behaviour and its effect on teacher/learner relationships

By far the most significant and intrusive issue during this cycle involved the deterioration in the general behaviour of the boys at school. As the cycle progressed they became more aggressive, arrogant, contemptuous, opprobrious and brutal in their treatment and interactions especially with other teachers in the school. As evidence of this I recall two incidents from my diary.

“Today I visit O’s class looking for the grade 8 class as they have not turned up for my lesson. J is with her and they are sitting at a table in the front of the class. As I enter there is chaos everywhere. Boys are running wildly around the classroom, tackling each other, shouting, upsetting the furniture with the teachers talking together, resignedly oblivious to what is happening around them” (Diary 20:05:2002, p. 31).

“Just when I thought the school was taking shape and the children were beginning to listen to the rules a day like Friday arrives. This again is a day from hell. The boys are wild and almost do whatever they like throughout the day. My classes are alright but the rest of the school is in chaos with teachers losing all control to the children. As much as I try I cannot ignore the noise, wild running around, shouting, bickering and fighting all over the school. During late morning P, one of the more competent female teachers, out of desperation, arrives in my classroom distraught, crying softly and at the end of her tether. L a grade 8 learner has been impossible. He is at the best of times smarmy, sneering, arrogant, vicious and dismissive of female teachers. It takes very little for his terrible suppressed anger and cruel, abusive and brutal behaviour to surface and explode uncontrollably. She tells me in frightened tones that in the middle of her lesson he lost his temper, walked to the blackboard and took over the class shouting abuse, threats and swearing at her. She could take no more and came to me for help. Later when he heard
that she had been to see me he threatened her personally. P just did not have the skills and experience to deal with this very difficult situation. Such is the atmosphere of teaching at this school” (Diary 06:06:2002, p. 42).

It was after incidents like these when this loud, volatile, eruptive and disruptive behaviour permeated the school, that I found teaching the boys extremely taxing and exhausting. On arrival at my class they carried the conduct and frame of mind with them and it spilled over into my periods as well and at times had a significant affect on the classroom atmosphere, my ability to teach and on me personally. When dealing with this behaviour I had to be particularly careful with my response to it as these incidents from days such as these in my diary points out clearly. It also indicates the novel methods needed to deal with them.

“For the first time on Thursday I lost it and shouted very loudly at W who with his impossible disruptive, loud and inconsiderate behaviour not only disturbed a number of other children in the class but made it impossible for me to teach. My very uncharacteristic loud bellow of anger and frustration had a shock effect on the class and they retreated into silence and were very quiet for the rest of the period. The message of this very unusual behaviour of mine swept through the school like wildfire and all the classes that subsequently came to me for a while were weary of me. This had both an up and a down side. We managed to cover much work but inwardly I felt diminished and of the opinion that I had done some damage to my classroom atmosphere, environment and the relationship with many of the innocents. This proved true when I noticed K, a grade 8 boy and one of the more quiet and sensitive boys, began to skip my classes. I found out from the school counsellor that I had scared him and now he was frightened of me. When I spoke to him he said that my anger had frightened him. Even though he admitted that I had never been personally angry with him my being angry with other boys he had felt threatened. I explained to him in detail that I only became angry with boys who willingly disrupted my class and teaching, he had never done so and I enjoyed him in my class very much. I told him I would have a special sign to tell him in future that I was not angry with him. I would wink at him. This brought a spontaneous smile, he gave a huge sigh of relief and me a big hug” (Diary 06:06:2002, p. 42).
“Today the boys were impossible - especially the grade 8's. There is always a problem when they come from a class where they have been unruly, have disrupted the lesson or teased and fought amongst themselves. It took me ten minutes to get any order after three of them began to fight aggressively about a pen. While they argue and get annoyed they hear nothing and listen to nobody. They become completely egocentric and lost in their own issue. They have no idea of trying to listen to another person or to understand another point of view other than their own. They talk and shout over each other and force their books to be marked before others who have been waiting patiently. This self-centeredness and selfishness is exhausting. It is extremely difficult to know what strategy to use with them when they start arguing. If you shout to stop them they just ignore you. If you take the side of one you lose the other. If you accuse, they are quite capable of picking up their stuff, shouting back and storming out or retiring to their desk to put their heads down and go to sleep. If you send them out to cool off they just go home” (Diary 13:05:2002, p. 25).

When I asked them to explain their reasoning behind certain unruly behaviours such as “joking” (Magdel Harper, 2003) they stated clearly that they saw the other person’s wrongs as a lack of respect or inability to listen to them. They could not however comprehend that they also contributed to the problem as well. They could not understand that if they wanted respect they had to show respect in return and indicate to the other person that they were willing to listen and not do certain things. In their eyes it was always the teachers’ or other person’s fault.

These incidents proved to me just how delicate and fragile the relationship between teacher and student is and how easily it is to damage the classroom environment and atmosphere that has taken so painstakingly long to build up. The currency of positive events to build up a caring, beneficial and affirming environment and negative interactions to break it down must be overwhelming in favour of the former.

From within this general deterioration of learner conduct the formidable and potent behaviour pattern mentioned in cycle one intensified. It had its origin in the pack survival strategies of the streets (Foley, 1983) and manifested itself in aggressive group protection, peer support and cooperative actions and strategies (Le Roux & Smith, 1998a). The methods described in cycle
one became extremely powerful and effective methods of disrupting a class, taking control of it and neutralising the teacher. These tactics were born I believe out of the general discontent with the school and aimed at any teacher where they detected any weakness or, in their view, they did not like or respect. The woman teachers were the main targets. As mentioned the actions were instigated, controlled and enforced with a quiet ruthlessness on the rest of the class usually by the self-appointed “godfather” of the class.

In dealing with this very uncomfortable situation I found understanding its causes to be helpful. Williams (1992; 1993;1996) provides some explanations for this powerful learner behaviour experienced at Masupatsela. He says that one reason lies in their early adulthood, life style, lack of exposure to mainstream society and the unsuitability of traditional school structures. Often the personal goals of the children and their life styles are not compatible. Authors such as Williams, 1992, 1993; Swart, 1990a; Ennew, 1994; Richter, 1988a,b) all agree that street children understand the need for education in making them employable, free of the stigma of the street and for getting them off and independent of it. Deep down they know that education is imperative to regain a place in mainstream society. However their life styles hinder them in claiming this vision.

The formal structure of the school with its rules, regulations, values and restrictions clashes directly with the highly prized adult freedom gained on the street by them. A freedom with few of society’s constraints, a place of excitement and where their needs and wants can be satisfied immediately. Very often street activities such as crime and substance abuse dominate their lives and create secondary anti-social habits and behaviour patterns (Williams, 1993). In this way skills, interaction patterns and knowledge, which are very different to those found in everyday society, are taken and made personal. Life on the street also occurs away from mainstream society and constant adults and so the value of wisdom and the stabilising ability of their advice and counsel is absent (Williams, 1992; De Oliveira et al, 1992; Le Roux & Smith, 1998 b).

The street imposes adulthood on the children from an early age. This affects how they perceive themselves and their living (Williams, 1993). They have the opportunity to think for themselves, to take responsibility for their own welfare and safety, achieve personal importance, express their thoughts independently and say what they like (Ennew, 1996; Schurink, 1995; Foley, 1983).
When they enter school however the conditions are very different. Here they are treated like children, there are rules to be obeyed. Adults, who they have little respect for, are in charge. Furthermore the authority of these adults has to be “graciously” obeyed (Foley, 1983). It is understandable that by being treated like a child when their perception of themselves is that of an independent adult and a survivor, they resort to disruptive and aggressive behaviour. Therefore one of the chief causes leading to disorderly and disobedient behaviour in formal schools is the conflict between the previous free street life style of the child and the formal values, structures and interactions of the school.

Foley (1983) says that the children’s pack like behaviour also can arise out of an urgency to cope with their changed life style. Often their familiar strategies of the street are not functional in the formal situation of the school. Conflict and misunderstandings arise as a result of the vastly differing approaches and experiences of the learners and teachers. The unfamiliar atmosphere and environment has the potential of releasing volatile and explosive emotions. In this conflict situation it is common for children to express their emotions through aggression, violence, vandalism, absenteeism or classroom discipline problems.

Boredom can also result in deviant behaviour amongst youth (Williams, 1992). Reasons underlying this boredom could be too much time on their hands, a lack of life purpose, an absence of cultural activities and a paucity of curiosity and a passion for life (Williams, 1992). A group or its leaders then often have the power of making life interesting. This was the case at Masupatsela. The learners had too much free time because of teacher absenteeism, incomplete timetables, boring lessons and long meaningless shelter afternoons to be endured.

Children will also resort to disruptive behaviour if they see school as a waste of time because of incompetent, uncaring and inferior staff (Williams, 1993). Street children appreciate and want teachers who are competent, patient and take the time to explain things and support them with difficult tasks and concepts. Other more authoritarian approaches are viewed as rejection, lack of respect and in most cases trigger anger (Foley, 1983).

From this discussion it may seem as if the source of conflict always lies with the children. This is not so. In many cases teachers contribute significantly to the problem by providing classrooms
that are dull, uninteresting, funless and lacking in challenge and excitement. Because of insecurities they are stiff, authoritarian, defensive and uncertain and therefore create a place of tight control and where routine rules. This was the situation with most of the teachers at Masupatsela and is probably why they experienced such terrible and frightening disruptive behaviour. On the other hand if an environment is established where children feel free to express their knowledge and skills, where they are openly accepted and valued, able show their weaknesses and strengths, encouraged to risk themselves and where the teacher’s behaviour is congruent with himself, they will seldom choose to undermine the teacher or the school (Foley, 1983). This I believe was at the root of why I experienced so little of the disruptive behaviour.

For teachers to be able to cope with the extremely taxing and difficult demands of a class of street children specialised training and experience is essential. Davis (1964) states that in many cases teachers are not equipped to deal with the specific problems that a street or slum school encounters. Teachers are faced with a culture and value system very different to their own and what they have been used to. Each day they are forced to deal with and adjust to a culture of physical and verbal aggression and of self-assertion from learners which is foreign to them. To be able to cope with this situation teachers need to study and be familiar with aggressive customs and behaviour so that through their own actions and responses they do not aggravate the position and call forth the same emotions and responses from the children. A very important function therefore of teachers in a street child school is to soften the learners aggression because this valued aggression in the children is destructive and dysfunctional in formal mainstream society where less antagonism and more collaboration are valued (Foley, 1983). Most of the volunteer teachers at Masupatsela had not received any specialised training of this nature.

In order to deal with this heightened aggression, disorderly and challenging behaviour in the school and especially in the grade 8 class, the school counsellor started a special Transactional Analysis (TA) programme with them in May 2002. The aim was to address their disruptive and disempowering behaviour in class, and towards their peers. The TA programme was designed to help them to understand and express their anger hurt and shame and in so doing lessen the negative interpersonal culture in the school. In order to support, inform and assist the teachers themselves were invited to join and experience the TA workshops (Magdel Harper, 2003).
Table 7.2 shows the responses to the question: What kind of teacher is needed to teach our street children? in a questionnaire given to the principal and four of the teachers at the school. It can be seen from the results that the teachers and principal regarded caring, open mindedness, flexibility, patience and well qualified and experienced as being the most important qualities needed by a teacher at Masupatsela. Although they recognised the value of these attributes, besides caring, these were the very ones they lacked. Apart from the multilingual ability the rest were qualities that I had specifically tried to develop and practice during both cycle one and two.

It may seem from this discussion of general disruptive learner behaviour in the school that I had experienced ongoing difficult situations in my classes as well. This was not the case. In fact my class became a quiet, stable, productive and popular haven in a school of noise, movement, disruption and conflict.

<table>
<thead>
<tr>
<th>Teacher quality</th>
<th>Responses</th>
<th>Teacher quality</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caring</td>
<td>4</td>
<td>Behaviour management skills</td>
<td>1</td>
</tr>
<tr>
<td>Open minded and flexible</td>
<td>4</td>
<td>Strong personality</td>
<td>1</td>
</tr>
<tr>
<td>Patient</td>
<td>3</td>
<td>Perseverance</td>
<td>1</td>
</tr>
<tr>
<td>Well qualified and experienced</td>
<td>3</td>
<td>Empathetic</td>
<td>1</td>
</tr>
<tr>
<td>Multilingual</td>
<td>2</td>
<td>Good listener</td>
<td>1</td>
</tr>
<tr>
<td>Good self-esteem</td>
<td>2</td>
<td>Emotionally stable</td>
<td>1</td>
</tr>
<tr>
<td>High stress resistant</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

|                              |           |                                  |           |

Table 7.2 Responses to question 1 of the teacher questionnaire: What kind of teacher is needed to teach our street children?

On the surface, apart from a few isolated incidents, the children’s behaviour while in my classes was very acceptable and at times exemplary. To add to this I experienced with them a warm, mutually respectful and cooperative relationship. In analysing why this was so the following reasons suggested themselves:

- The children enjoyed and responded to my student centred approach - an approach very different to the others experienced in the school.
- I had researched and made a study of street children and therefore understood them fairly
well.

- I had wide general teaching experience and had spent a year prior to the school opening teaching them at a shelter where I had gained valuable and specific skills and experience.
- I was secure in myself and the content knowledge I was teaching.
- I possessed and displayed the personal qualities necessary for teaching them.
- I created a classroom atmosphere and environment that they respected, enjoyed and regarded as authentic.
- I had won their trust.

In support of this perception of my relationship with the children I include a quote from an interview done by the school counsellor with L, one of the grade 8 boys.

“I think that Mickey is the understanding teacher - the teacher that always want to help us - the teacher that does not always give up on us - is always encouraging us what we do. I can feel Mickey he is a good teacher because he is always there for us when we need something - you see we need help with this thing he always help us. Mickey understands what he teaches you. If he teaches you Maths and if you don’t understand he call you and walk with you that thing until you get it right and he will be happy if he get all of us right. He knows Maths. He says we must help each other in class. He is like a parent to us. He understands us. He not like others. If we could have another teacher like him in the school it would be nice” (Learner interview with Counsellor, 20:05:2002).

However, even in my class, I always had the impression that just below the surface simmered an explosive volcano of emotions waiting to be triggered into action by the slightest provocation. One always seemed to be teaching on the brink. This was especially true for the grade 8 class.

Finally in reflecting on the behaviour of the learners up to the end of the second cycle I was struck by the great paradox in the way they acted. On the one hand when they were together and worked as a pack, their behaviour was one of aggression, belligerence, hostility, callousness and great power. On the other when they were alone with me and I spoke to them honestly, one on one, about their lives, futures, dreams, problems, joys, fears and worries they were meek,
acquiescent, often very frightened, apprehensive and more often than not displayed a deep sense of sad powerlessness and fateful resignation.

7.4.2.2 Methodology

Table 7.3 summarises the lesson observation scores recorded by myself and the independent triangulator. After the lesson the triangulator scored the lesson at 94% of the cognitive teaching style model. I rated myself at 83,7%. The average of these scores being 88,8% - a score much closer to cognitive teaching style aimed for. This shows an increase of 26,5% over cycle one.

I attribute this gain to the following possible reasons. The inclusion of scores for cooperative learning which had not been part of the methodology used in cycle one. Part three of section A, therefore increased substantially from 0% to 93,7%. Part four of section A which dealt with the role of language in learning, also increased markedly from 57% to 86,6%.

<table>
<thead>
<tr>
<th>Observer</th>
<th>Section A</th>
<th>Section B</th>
<th>Section C</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Part 1</td>
<td>Part 2</td>
<td>Part 3</td>
<td>Part 4</td>
</tr>
<tr>
<td>Max</td>
<td>27</td>
<td>15</td>
<td>24</td>
<td>15</td>
</tr>
<tr>
<td>Triangulator</td>
<td>27</td>
<td>15</td>
<td>24</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>93,3%</td>
</tr>
<tr>
<td>Researcher</td>
<td>25</td>
<td>12</td>
<td>21</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>92,5%</td>
<td>80%</td>
<td>87,5%</td>
<td>80%</td>
</tr>
<tr>
<td>Average</td>
<td>26</td>
<td>13,5</td>
<td>22,5</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>96,2%</td>
<td>90%</td>
<td>93,7%</td>
<td>86,6%</td>
</tr>
</tbody>
</table>

Section A: Teaching practice - Teaching for thinking

Part 1: Cognitive questioning
Part 2: Teacher feedback to responses
Part 3: Cooperative learning
Part 4: The role of language in learning
Part 5: The use of learning aids

Section B: Learner behaviour

Section C: Teacher\learner relationship

Table 7.3 Summary of triangulated lesson using observation schedule - Cycle 2 -
This was as a result of the increased use of language that cooperative learning demanded. The overall average for section A which covered the teaching methodology increased substantially by 27.5%.

Section B which was concerned with learner behaviour also increased notably from 62.5% to 95.8% - an increase of 33.3%. This improvement in behaviour during these lessons was particularly pleasing in the light of the general deterioration of conduct in the school and when seen in conjunction with the increase of 11.4% in the teacher/learner relationship provides further evidence of the effectiveness of both the methodology and my student centred approach with regard to the classroom interrelationships.

In this cycle the primary teaching methods of cognitive questioning, explanation and demonstration were broadened to include a substantial amount of cooperative learning. This was done in an attempt to achieve the aims mentioned earlier in the planning phase.

*Cognitive questioning*

Although this technique continued to play an integral part of the lessons it was not as prominent and dominant as in cycle one. In the triangulation of lesson 6 both the triangulator and the researcher scored the effectiveness of this aspect of the lesson very highly i.e. 100% and 92.5%. This meant that in this facet the lesson was close to what was envisaged in the model. It was used mainly to hook learners into the lesson: Hold up a magnet. What is this? Where have you seen a magnet before? What can a magnet do? (Lesson 1, Tape 7, 17:05:2002), to revise lessons: What have we learnt about magnets? Why could I put iron, steel and nickel into one group? (Lesson 2, Tape 8, 21:05:2002), introduce a new concept into the lesson: Where do you think this bar magnet is the strongest and where the weakest? (Lesson 3, Tape 9, 22 & 23:05:2002), to expose the thinking of learners: How did you find the poles of an unmarked magnet? But you have not told me what has happened? Explain to me what you did? (Lesson 4, Tape 10, 24:05:2002) and to mediate problems experienced when they worked together in groups (Lesson 5, Tape 11, 28:05:2002).
Perhaps because of their familiarity and comfort with the method and me the learners always showed a willingness and confidence to risk answers to even the most difficult of these questions. For example the following are answers to the challenging question: Why did all the free swinging magnets stop in the way they did?

L: You know - because - what the magnet decides - the power - that side, this side - its free now.

T: It’s weak in the middle and strong in the ends. That is why it stops like that.

LE: It stops North South because perhaps there is something pulling it (Lesson 3, Tape 9, 22 & 23:05:2002).

However their success in answering these type of questions correctly diminished as the questions became more cognitively and creatively demanding, more abstract, more open and increasingly general in nature. This was especially true with regard to questions requiring the learners to visualise, describe a process, make deductions from collected data or transfer what had been learned to other situations. It was very apparent for instance in lesson 4 when they found it extremely difficult to design, articulate and carry out a process of naming the poles of an unmarked magnet using a magnet with the poles marked on it (Lesson 4, Tape 10, 24:05:2002). As an example of this I include the different feedback answers of three groups to this question. It is obvious from three of their replies that they cannot see and comprehend the problem inherent in their method.

Yizo Yizo: I have two magnets. I will take the other magnet and point the other one with unmarked magnet. Then I will see what happens.

Slow poison: I take two magnets. When it repels I can see that is North and North. When its attract I can see that is North and South.

Die crazy: We put the magnet together and when they attract we will see that is North and South and when they repel we will see that they are the same.

However the forth group, the Die Hard’s get much closer: I will put the South pole of another magnet against the magnet. If it attracts it is the north pole. If it repels it is the South pole (Diary 24:05:2002, p. 36).

During this cycle I became even more aware how necessary it is for the teacher of these boys to
understand their uniqueness, their culture, their backgrounds and life styles. If one is to use the experiences and knowledge of the learners to help them to construct and understanding of new concepts through the use of cognitive questioning, then their reality, their limitations, strengths and potential needs to be known, recognized and appreciated. I found the pool of experience, the frames of reference and the life backgrounds which they used and on which, as a teacher, I had to draw to be very different to what I had experienced in mainstream schools. As a teacher I was often, on the one hand, amazed by their lack of basic everyday academic knowledge but on the other, impressed by their worldly awareness, street wisdom and resilience.

Cognitive questioning which forced the learners to apply what they had learnt also formed the basis of the questions asked in the written test at the end of the cycle. Here is an example taken from the achievement test written on 26 July 2002.

Question 14:
Here is an iron nail hanging in the middle of a glass of water.

GLASS

WATER

IRON NAIL

MAGNET

A. If I bring a strong bar magnet close to the side of the glass what do you think will happen? ..................................................................................................................

B. Why do you think this will happen? ..............................................................................

Cooperative learning

In observing this aspect of the lesson both the triangulator scored it highly. i.e. 100% and 87,5% The average of the two being 93,7%. Both of us therefore had this facet of the lesson very close to that of the model.
On reflection this aspect of the methodology had a mixed level of success in terms of the reasons for including it. One of the chief causes of it not achieving completely what it was designed to do was not inherent in the technique but in the practicalities of implementing it. First, it was during this time that absenteeism started to increase. This had the effect of destabilising the groups each week both in terms of numbers and members. It was therefore very difficult to keep the groups the same and to rotate the roles within them effectively. Second, it soon became apparent that certain members, because of their dearth of written and verbal English ability, could not take on certain of the roles such as talker and writer. My lesson observation records the following: “C is the writer. He struggles terribly. The others first become irritated, then angry and finally switch off” (Lesson 3, Tape 9, 22 & 23:05:2002). Third, on a number of occasions the boys entered the class in such a highly charged state of mind because of behaviour in previous lessons that working together without friction became very difficult for them. They just could not forget what had happened before, focus and concentrate amongst all the anger and emotion. When given time to work on their own the conflict surfaced again. Positive aspects achieved with it included a larger pool of English available to the learners, more opportunity for each of the learners to use English, more active participation and a wider involvement in problem solving.

Selecting the groups according to their academic abilities also created problems. With street children shelter, friendship and established alliances are very strong and so combining individuals without regard to these cliques becomes problematical. I tried for a few lessons to maintain static groups but was unsuccessful. Erratic attendance and a high level of resistance to the groups I had chosen convinced me to reconsider this approach. In the end I allowed them to choose their own groups. I also found the initial choice of group names interesting and insightful. The names chosen for the groups in each of the four grades were as follows:

| Grade 7: Dikis; DVD, JD’s; VIP’s |
|---------------------|-----------------|-----------------|
| Grade 8: Slow poison Die crazy Yizo Yizo Die hard |
| Grade 9: Skhokho Group A Man United |
| Grade 10: 3 for Joy Honey bees Powers |

Three of the four groups in Grade 8, the class which proved to be the most difficult, aggressive, angry and disruptive, chose the names which contain within them elements of their own past reality such as hostility, malice and violence. The choice of Yizo Yizo, the controversial
television programme running at the time which showed students with similar antagonistic characteristics and which the boys in this class identified strongly, was also significant.

Because of the individualistic and egocentric nature of the boys getting them to work cooperatively in groups proved to be difficult. Everybody wanted to be the leader or worker and carry out the experiments with the equipment, nobody wanted to be the writer or talker. Often the leadership role would result in loud, dominant and directing behaviour while being overlooked for this role would cause withdrawal into sullenness, passivity or sleep. However as the behaviour for each of the roles was explained, demonstrated, modelled by them and rotated fairly they carried them out better and better and by the last of the lessons the system was established and working well.

At the heart of getting the learners to cooperate and work profitably lay in the provision of challenging and meaningful tasks with clear, understandable and precise instructions for carrying them out successfully. As soon as doubt, confusion or uncertainty with what had to be done occurred, cooperation would recede, bickering would start and the focus of the lesson would be lost. In this regard clear, well designed and unambiguous worksheets with simple and direct instructions proved to be invaluable. These worksheets guided and focussed the learner’s discussions and provided them with a reference to lead them through the tasks, they presented a framework and model for recording the required information gathered from the tasks, they proved very useful as a source of reference and vocabulary for those who had to report back to the class and they created useful permanent personal reference material for tests and exams.

The crux of the success of the cooperative learning was the design of tasks and activities which were in the learners’ zone of proximal development (Vygotsky, 1978) and therefore cognitively challenging, interesting and fun. These consisted of:

- investigations to solve questions. Where is a magnet the strongest? (Lesson 2, Tape 8, 21:05:2002). What is the effect of magnetic poles on each other? (Lesson 4, Tape 10, 24:05:2002).
- transfer problems associated with a learnt concept. How can we separate the salt from a mixture of salt and iron filings? (Lesson 1, Tape 7, 17:05:2002). How can I find which of two magnets is the stronger? (Lesson 2, Tape 8, 21:05:2002).
In many cases their suggestions for solutions were very innovative and creative. For example their responses to the problem of how to make a magnet from a nail were especially interesting and imaginative:

- Put the magnet on the nail and fix it there with sello tape.
- File a magnet. Take some of the iron filings and glue them to the nail.
- Put many magnets in a bottle and then lock the nail in the bottle with the magnets for some time  (Diary 31:05:2002, p. 39).

They enjoyed the personal involvement with the apparatus and carried out the experiments with genuine interest and relish.

The time spent facilitating each group while they were working together was the most valuable and rewarding. It was during this time when I was working with three or four learners that the warm, relaxed and close relationship so necessary for the success with street children could develop. In order to establish and maintain an inclusive and intimate atmosphere, I made it a habit to physically join the groups, get down to their level to speak and make eye contact with them on a horizontal level.

On balance I believe that cooperative learning has a valuable place in teaching street children in a formal situation but because of behavioural reasons, for it to be successful, much more time is needed to establish the routine, roles and skills than in normal schools.

In analysing the teachers’ questionnaire the majority of the responses stated that discussion, interaction, debate, discovery, problem solving and active participation should form the basis of the methodology used. A narrative approach was a complete failure because the learners could not attend for any length of time. The irony of the situation was that this narrative approach was precisely the method of teaching used by most of the teachers for the majority of the day. They also said that because of behaviour problems group work was not very successful (Teachers’ questionnaires 20:05:2002).
7.4.2.3 Language
Throughout this cycle the crucial role that language played in the success of the learning was reinforced. It did not matter whether I was explaining, questioning or facilitating the groups or whether they were working cooperatively, providing feedback to the class, completing the worksheets or answering the test questions, language and especially English was central to success. Their English deprivation, huge gaps in their schooling and the corrupting effect on their language caused by the street culture continued to act as a ball and chain to their learning.

Their restricted command of English in terms of this cycle was evident in different places:

- talkers struggled to provide feedback to the class after investigations. As evidence of this I quote my diary of 17:05:2002. “Some of the talkers have great difficulty in telling me in English what they have discovered. They are not shy to try but struggle to find the words and to put them in any coherent sentence. D for instance stands up with great confidence but after spluttering around for a while and under his own frustration and that of the group and class concedes defeat and sits down. S answers the question: “Why are there the same amount of iron filings on both poles of the magnet?” as follows: “Because the both sides - sides - that one - it can both sides - because it is the end.” Then he just stops, can’t continue and sits down (Lesson 2, Tape 8, 21:05:2002).

- inability of reading instructions on the worksheets.

- difficulty of the writers in recording the group’s discussions on tasks, problems and questions on worksheets. This was especially true for the recording of a process or sequence of actions. Even though the group was capable of verbally coming up with a solution they found it extremely difficult to find the language to record their answers. For instance in answer to the transfer question how would you get some iron nails out of a place that was too small for their hands they come up with the solution of using a magnet but even as a group they were incapable of writing down the process in any logical way. I decided to set up the problem practically and then got them to solve it in front of me. I then asked the writer to say aloud what the leader was doing. Then word for word the writer repeated it and tried to write what he had said down. Even this was extremely difficult for him to do. He said: John puts the magnet ....... but could not recognise that “John” was the first word of what he had said or that “put” was the second. The sequence of seeing, thinking, saying and then writing down in words of what
Although one of the aims of using cooperative learning was to improve the boys English I believe the policy that I used of allowing them to choose their own language for group discussions and English for feedback to the class and for recording in worksheets was useful and the correct one. Having the learners struggle simultaneously with concept formation or problem solution and the language would have been restrictive. To insist on English within the groups would have also slowed the learning process down, stunted the natural curiosity of the students and retarded the pace of the lesson. One of the great delights and refreshing aspects in terms of language with these children was their keenness and confidence to try, to risk answers and to speak English even though they knew that they would struggle with the language. In all my teaching experience using the second or foreign language of the students as the medium of instruction this was unique and a delight. However I soon realised that the key to the development of English capacity was to make all my lessons of a dual nature - both subject and language lessons and for all teachers in the school to do the same.

7.4.2.4 Classroom environment and atmosphere
Positive classroom environments have been linked with academic achievement (Fraser, 1991), improved schooling for children at risk (Pianta & Walsh, 1996) and positive effects on students’ motivation, attitudes and interpersonal behaviours (Battistich, Scaps, Watson & Solomon, 1996). Research also suggests that positive student-teacher relationship is an important aspect of a positive classroom environment (Birch & Ladd, 1997).

Question 2 of the teacher questionnaire asked: What classroom environment and atmosphere is needed to teach our street children? Table 7.4 contains a thematic analysis of the responses from the principal and four of the teachers.

Although these were the qualities that the staff believed were important and necessary when I observed the reality of most of the classes it was these very qualities that were absent. I believe that this was one of the root causes why these teachers experienced such difficulties with the children.
Despite the deterioration in the general behaviour of the boys in the school there was a consistent improvement in the atmosphere in my class. All six of the boys interviewed independently by the school counsellor were very positive about coming to and being in my class.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stable</td>
<td>2</td>
</tr>
<tr>
<td>Strong culture of learning</td>
<td>2</td>
</tr>
<tr>
<td>Friendly</td>
<td>2</td>
</tr>
<tr>
<td>Secure</td>
<td>1</td>
</tr>
<tr>
<td>Non authoritarian</td>
<td>1</td>
</tr>
<tr>
<td>Accepting</td>
<td>1</td>
</tr>
<tr>
<td>Sense of personal freedom</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 7.4 Summary of responses to question two of the teacher questionnaire: What kind of environment and atmosphere is needed to teach our street children?

Some of their replies to the question: What is it like in Mickey’s classroom? were:

L. It is nice in his classroom because we concentrate. He don’t shout at us - he talk to us nicely like he respects us and then we respect to him back. He wants to build our future.

H. I like it because we are quiet.

D. I like it in his class because he is not - he does not talk strong language.

A. I like it because Mickey he not shout at us. He always talk with us nicely.

There were however a number of frustrating factors that impinged and made the creation and maintenance of a motivating and positive learning environment difficult. These were:

1. Missed classes
   This made it difficult to maintain continuity and was caused by chronic absenteeism, habitual late coming, bunking and leaving school early.

2. Lack of stability
   This related to the frequent forgetting, losing and having books and writing materials stolen.
There was a constant flow of new children in and out of the class. One third came and went on an ongoing basis. New children had large deprivation gaps in their knowledge and had to be taught individually in order to catch up - a very difficult and demanding task.

3. Lack of behavioural parameters
Because of their inbuilt sense of freedom acceptable and established classroom conventions and behaviour was often forgotten and overlooked. Classroom rules, even those imposed by themselves, were ignored if they did not suit them. This led to them being distracted easily. Cooperative roles were fought over and seldom maintained. Strength of personality usually took over with withdrawal or dominance into alternate behaviour.

4. Lack of insight into instructions
Verbal but especially written instructions in worksheets, no matter how simple, were followed with great difficulty and had to be explained in minute detail. This created frustration for many of the faster learners.

5. The language problem
This was forever frustratingly present and detracted from creating an environment that had pace and momentum.

6. School environment
To be successful an approach to creating positive classroom environment and atmosphere it is essential that it is supported throughout the rest of the school. The free flowing chaos and laze faire approach found throughout most of the school made its development and maintenance in my class very difficult.

7.4.2.5 Personal effect of the cycle on me and other teachers
Without a doubt this cycle proved to be the most difficult, taxing, emotionally draining, demoralizing and exhausting of the year for the staff. The fundamental cause for this was the powerful, organised pack behaviour of the children. The effect of this conduct over the space of two months was to wear the teachers down emotionally, exhaust them psychologically and physically and bring them to the point where they began to allow issues to slip by and deteriorate
in class just to keep the peace. They stopped caring, often lost their cool and resorted to drastic and extreme authoritarian methods of control most of the time to protect themselves - an approach which only fuelled the behavioural problem. My observations of this situation are captured graphically in my diary.

“At our staff meeting today I can see the stress of the school is taking its toll left, right and centre on the teachers. C was “sick” today. At our staff meeting after school P, O, and J look exhausted with flat expressionless eyes. IM, the principal, is at the end of the road with fatigue and worry. With no positive feedback from the children or monetary reward for their efforts the volunteer teachers find the going nearly impossible. During this time we have lost four volunteer teachers - the school and children have just chewed them up and spat them out” (Diary 15 & 16 May 2002, p. 28 & 29).

I did not escape the effects of the charged and difficult atmosphere and events of this time. They pushed me and my coping skills to the limit as well. However when at the end of May the crisis point arrived I stopped, reflected on the situation and my strategies and decided to change how I dealt with the difficult classroom behaviour. I analysed my reaction to their behaviour and their responses to my reaction. I decided that would have to develop a higher tolerance to their spontaneous and disorganised behaviour, find a counter to their often lower than expected motivation levels, accept their fierce independence and chip away to change their lack of appreciation for classroom etiquette. I also needed to counter my own frustration and sense of urgency for them. I put the following plan successfully into operation.

1. I consciously and deliberately did not allow their strategies or behaviour, which I experienced gradually over a day, to wind me up to a point of high tension. I found a balance between empathy, compassion and a strategy which allowed for a learning culture and environment and a hard line which set very definite boundaries and parameters for behaviour.

2. I explained my position to them in detail. I stressed that I was not going to get angry or visibly upset. I would not respond with frustration, exasperation and displays of anger to all the things that made me cross like coming late, having no books or writing materials, bickering, teasing or fighting.

3. I would only concentrate on those who wanted to participate and allow me to teach. I
would not allow the disruptive few to spoil it for myself and the rest.

4. The strategy which I put in place to achieve this was very simple. At the back of the class, I placed five desks - all close to and facing the back wall. Anyone who made it difficult for me to teach and for the class to learn was removed from his desk, without any fuss, and placed in one of these desks facing away from us all. I ignored them and they were not allowed to participate in the lessons until their behaviour and attitude had improved to the point when we as a class decided that they could return.

I found this tactic together with my ongoing student-centred approach to be extremely effective in solving the behaviour problems, helping me to deal with the stress, my own high energy involvement and protecting me against the debilitating emotional effects of my unavoidable caring nature.

The effect of this cycle on me was a combination of stress-produced fatigue, weariness and strain caused by the behaviour and a sense of real achievement, progress and satisfaction with what I had achieved with the boys. They enjoyed me as a person and teacher - they told me and others so. They found my classroom a haven and a place where they wanted to be. They saw what I was doing with them as relevant, meaningful, enjoyable and authentic but more importantly they provided me with a feeling of being involved in something vital, important and perhaps being able to make a positive difference to their lives. It was the spirit of this conviction that carried me through the many trying, tough and tired times.

7.5 Conclusion
7.5.1 Student’s written test results
Table 7.5 contains the results of the written science achievement tests for the grades 7 and 8. The test results for this cycle were a little disappointing with the class averages for grade 7 dropping by 7,1% to 58,8% grade 8 dropping 8,6% to 63,6%. This drop could be ascribed to a number of causes. The teaching methodology might not have been as effective, many of the strong learners were absent for test two especially in grade 8, the test might not have been comparable or the language of test two might have been more demanding. I could not say which of these reasons dominated. The results for the June Science exams which included the content covered in cycle one and two for these two classes were very similar with grade 7 achieving a
slightly better average of 65% and the grade 8's the same at 64%. On the other hand because of the deprivation and deficiency of basic mathematical concepts the results for these two classes in this subject was poorer i.e. 40,2% and 51% respectfully.

<table>
<thead>
<tr>
<th>Learner</th>
<th>Grade 7 - 11 learners</th>
<th>Grade 8 - 11 learners</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mark - max 38 % Test 1 %</td>
<td>Mark - max 38 % Test 1 %</td>
</tr>
<tr>
<td>1</td>
<td>absent absent 40,9</td>
<td>22 57,8 81,8</td>
</tr>
<tr>
<td>2</td>
<td>20 52,6 86,3</td>
<td>30 78,9 95,4</td>
</tr>
<tr>
<td>3</td>
<td>23 60,5 72,7</td>
<td>37 97,3 77,2</td>
</tr>
<tr>
<td>4</td>
<td>28 73,6 Absent</td>
<td>19 50 31,8</td>
</tr>
<tr>
<td>5</td>
<td>28 73,6 81,8</td>
<td>26 68,4 68,1</td>
</tr>
<tr>
<td>6</td>
<td>27 71,1 77,2</td>
<td>15 39,4 81,8</td>
</tr>
<tr>
<td>7</td>
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<td>8 21,1 45,4</td>
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<td>8</td>
<td>23 60,5 77,2</td>
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<tr>
<td>17</td>
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<tr>
<td>Mean:</td>
<td>22,7 58,8 65,9</td>
<td>24,1 63,6 72,2</td>
</tr>
<tr>
<td>Range:</td>
<td>12 to 30 31,5 to 78,9</td>
<td>8 to 37 21,1 to 97,3</td>
</tr>
</tbody>
</table>

Table 7.5 Summary of learners’ written achievement test of cycle two

In reflecting on, studying and analysing the themes that emerged from this cycle I drew the following conclusions:

- the development and appearance of the disruptive pack behaviour of the learners had had a serious and detrimental effect on the running of the school, the environment and
atmosphere of most of the classes, the morale and sense of purpose of the teachers and to a much lesser extent my ability to maintain and improve my classroom milieu. To improve the functioning of the school and the teaching and learning this issue would have to be addressed vigorously.

- Although the use of a cooperative learning methodology did result in the learners playing a much more active part by doing the investigations with the apparatus themselves and by allowing for more communal thought and discussion, it did at times become laboured and result in group members withdrawing when they were not allocated the active roles. A more eclectic approach to lesson planning needs to be used. A combination of cognitive questioning, cooperative learning and traditional methods needs to be considered when teaching a topic. No one method is suitable for all lessons.

- The combination of cooperative learning with cognitive questioning did help to increase the pool of English available to the students but the limited accessibility of active, usable and subject English continued to hamper the effective learning and transfer of concepts. A further effort to boost this communal bank of English as well as the prior knowledge deprivation was needed.

- I would consciously need to continue with the student centred approach and apply the strategy of calm, caring firmness.

Even with the wisdom and experience of the reconnaissance phase and cycle one, this cycle proved very demanding and challenging. As time passed my relationship with the learners had deepened, I had been forced to adapt both my teaching methods spontaneously and my response to the often difficult and confrontational behaviour I was presented with. At the same time my respect for the boys’ resilience, enduring optimism and perseverance continued. The insights that I had gained during this time would make the planning and implementation of the last cycle interesting and stimulating.