

- T: Can you demonstrate an example?
- A3: We just can't speak a conversation without using a few Zulu words and making some phrases.
- T: Did you change languages when the work was more difficult?
- A3: No, all the time!
- T: Mpho, can you think of any instances when you had to swop languages?
- J6: Most times words... like don't always come so easy in English so when I wanted to express myself ... like I wanted to tell him "I really want you to work now!" I'd tell him in Zulu.
- T: What would you say?
- J6: (hitting the table) "Sebenzamanje! Isikati ukusebenza, stop talking to your friends, usebenza manja!"
- T: It sounds to me that you speak Zulu only when you are cross.
- J5+6: (both nodding) Ja ...
- T: And when you weren't cross?
- J6: Then we spoke English.
- J5: There was a time when he wanted to go and sit with his friends during the work and he sometimes didn't do the work ... so we'd call him and check his work and then he'd complain -
- J6: but there was a time when he really like did his work ... he was sitting with his friends so we let him sit with his friends because he was responsible enough to do his work after we finished to check. We didn't have to call for him.
- T: So Thokozani, you're now going to be a journeyman. How will you do things when you're a journeyman?
- A3: I think the person will not be happy about being looked after so just let the person be free. I'd check on him sometimes ... but I'd let him work freely.

4.5.2.2. Analysis on transcription of video tape - Group 1

The reasons given by each of the apprentices as to why they were in the group reveals something about their attitude towards and perception of the group method. It also showed what their interests were and how they went about having their interests served by the group.

Thokozani states:

I didn't do well in the first term exam in English. There was a decision made that those who didn't do well should be put with pupils that did do well and I was put with these girls.

Firstly, he sees the problem as being just his performance in the first term exam and not in any other exam or in English in general. He therefore does not acknowledge that he needs help but implies that this lapse was an isolated incident. Secondly he talks about how the process was decided in passive voice establishing himself as a 'victim' of the 'decision made'. He is not at all happy about having been put into this

group and even though his marks improved the most in the class (27%), this still doesn't change his mind.

He is openly hostile towards Sibongile and Mpho. He doesn't refer to them by name but rather as 'these girls.' This after they have been working together for six weeks. He is highly resistant to the group arrangement. His aim is to improve without help *and at no time does he acknowledge that the girls assisted in his improving his marks.* He says:

I wanted to be on my own and I wanted to prove myself.

Thokozani wanted to prove himself on his own and was therefore resistant to the group. This made it difficult for Sibongile and Mpho to serve his interest and operate as his journeymen. Because he was reluctant to work with them it seems they took on the role of 'policing' his work. This is how he perceived it. He says:

They were always checking on me, checking on me ... whatever I did they were checking on me! His repetition on 'checking on me' echoes the feeling of claustrophobia they induced in him. *The tension present in this group is also evident in the response of the journeymen:*

But he was always complaining that we were treating him like a baby ... but we were just like asking if he had done his homework and if he was doing his work during classes.

The journeymen had difficulty breaking into Thokozani's 'work site' and didn't succeed in reaching the stage where they could mediate his learning because he wanted to exclude them and work alone. Their attempt at mediation degenerated into *trying to monitor his behaviour.* Ironically, this was not necessary as when I asked them what they did if he didn't do his work they both answered spontaneously:

He always did his work.

One wonders then if their intervention was necessary or if Thokozani would have improved by himself which was his intention. Even when it came to code switching it was evident that the girls switched languages when they were frustrated with Thokozani's resistance to their help. Mpho says:

When I wanted to express myself... like I wanted to tell him 'I really want you to work now!' I'd tell him in Zulu.

Even Sibongile, who had worked so well with Martin in the previous cycle, had lapsed into 'bullying' Thokozani and focussing on trying to manipulate his behaviour instead of modelling the task at hand at any one time. She says:

He was sitting with his friends so we let him sit with his friends because he was responsible enough to do his work, after we finished to check.

When working with Thokozani the 'shared cognition' evident when she was with Sylvia and Martin disappeared and her role has become one of monitoring her apprentice's behaviour rather than sharing the negotiation of meaning. It seems that in this group no-one's interests are really served even though Thokozani was the top apprentice at the end of the term. Not one of the group members gained what they set out to achieve from the group as such.

As far as gender is concerned there is no evidence that Thokozani was against his journeymen because they were girls, but the fact remains that he was totally resistant to working with them and that they had difficulty is successfully dealing with his resistance.

GROUP 2 - CLEMENT (A4); MERILLDENE (J7); ANGIE (J8)

(CLEMENT'S MARK IMPROVED BY 25%)

- T: Why are you sitting between these girls?
- A4: I needed help with my English because I scored a low mark in my exam and I was appointed to these girls and they helped me push my marks.
- T: In what way did they help you?
- A4: Well, they had patience with me and were really nice to me.
- T: Merilldene, can you tell us anything about what happened in your group?
- J7: We just did a lot of work and we helped each other out. It wasn't just us helping him, he helped us as well.
- T: In what way did he help you?
- J7: When there was something really difficult to answer he helped us ... we all helped each other.
- T: So it was just not you helping him?
- J7: No, it was a three triangle thing.
- T: Angie, what do you think?
- J8: We helped each other a lot.
- T: Can you give me an example?
- J8: In some sections we helped Clement and in others he helped us and we put all our ideas together and then...
- T: Clement, if you were giving them answers then why wasn't your work so good in the first term?
- A4: Well, I don't think I really applied myself to the work. But ..um ...sometimes I wouldn't understand stuff, but I thought I did. I thought I got it, but I never really did get it.
- T: And how did the group change that?

- A4: If I didn't understand something they would explain to me.
 T: Why didn't you ask the teacher in the beginning?
 A4: I didn't ask the teacher because I thought I had it ... but I lost it.
 T: How did the group let you realise that you didn't have it?
 A4: I could look at their work and see that mine was different.

4.5.2.2. Analysis on transcription of video tape - GROUP 2

In contrast to Thokozani, Clement admits that he needed help with English in general and not just the exams.

I needed help with my English because I score a low mark in my exam.

He therefore went into the group believing that he had something to gain and was willing to work with his journeymen. He says:

I was appointed to these girls and they helped me push my marks.

Unlike Thokozani he acknowledges the girls role in his improvement.

The dynamics of the second group were quite different from that of the first group. Clement went into the group with the aim of improving his English. His journeymen had the same goal, which is they wanted to improve their English. When asked why the group was successful, Merrildene said:

We just did a lot of work and we helped each other out. It wasn't just us helping his, he helped us as well.

She describes the dynamics of their group as:

A three triangle thing.

This is an accurate description of a collaborative group involved in distributed cognition. She goes on to say that

we all put our ideas together and then ...

although she didn't quite know how to explain the result it was evident from the work they produced that they operated as a successful collaborative group.

Clement profited from the group in that before he was under the impression that he had grasped concepts and so didn't ask questions of the teacher, but when in the group he was able to compare what he understood with what the others in the group understood. He said:

I didn't ask the teacher because I thought I had it ... but I lost it.

When asked how things differed in the group he remarked:

I could look at their work and see that mine was different.

The journeymen mediated his learning by providing their work as a model against which he could compare his understanding of the concept being taught.

The second group clearly had no problems with the fact that the two journeymen were girls and the apprentice was a boy. Clement states:

They had patience with me and were really nice to me.

GROUP THREE. LEIGH (A5); GABRIELLE (J9); BRYCE (J10).

(LEIGH'S MARK IMPROVED BY 24%)

- T: Leigh, why are you with this group?
- A5: Well, ma'am, I was the worst and I needed to improve my work a lot ma'am, and I didn't want to get the worst mark again ma'am.
- T: Alright. And were you happy to be put with these two boys?
- A5: Oh yes, ma'am! I was very happy.
- T: In what way did they help you?
- A5: When I didn't understand something then I would ask Gabrielle or Bryce to explain the work to me ma'am.
- T: Did you do this during lessons?
- A5: Yes ma'am.
- T: Gabrielle, how do you think you helped Leigh?
- J9: Well, Leigh did a lot ma'am. I could see he can do it. All that he needed was the discipline and attention. So every time he didn't understand something I just broke it down into simpler .. uh..explanations and if a ... uh ... question was too complicated I just simplified it for him.
- T: And do you think that that helped you?
- J9: Yes ma'am. My mark went up as well.
- T: Why?
- J9: Because as they say 'the teacher learns from the student just as the student learns from the teacher.
- T: What did you learn from Leigh?
- J9: That no matter how hard it is you can always succeed.
- T: How did this effect your English?
- J9: When I simplified things for Leigh I also simplified things for myself. So the work became easier for me.
- T: Good! And you Bryce, how did you operate in this group?
- J10: Gabrielle, um, helped most ... umma'am ...um ... but if he asked me questions I'd answer them. Um ... but , ma'am, Gabrielle also helped me a lot.
- T: What did you learn from Gabrielle?

J10: When I didn't understand ...um...and when questions were hard ...um... then I'd ask him.

T: Do you think your group was successful because you were all boys?

(silence)

T: Would it have made a difference if there were girls in the group?

J9: Yes ma'am. Because we're all boys it's easier to relate to each other.

T: How do you relate differently to girls than to boys?

(silence)

T: Do you think your language is different?

(silence)

T: Do you speak differently when you are speaking to boys?

ALL: Yes, ma'am.

T: How is it different?

(silence)

J9: We use a different tone ... and we understand each other.

(they are unable to describe or give examples of the tone)

T: What types of things do you say to each other?

J9: We tell Leigh to go eat when he gets home and then do the work, *don't go play in the street*, because we know sometimes we also feel lazy.

T: And don't you think girls ever feel lazy?

J9: Girls are usually more hardworking than boys!

4.5.2.2. Analysis of transcription of video tape - GROUP 3

Leigh's response to the question of why he was in a group was clear and direct:

I was the worst and I needed to improve my work a lot ma'am, and I didn't want to get the worst mark again ma'am.

Like Clement and unlike Thokozani, Leigh saw the group as being able to serve his purpose of 'not being the worst'. He acknowledges that it is not just the exam or his English that needs improvement but he refers to 'my work'. *This is much more general. He states that he was happy to be in the group because*

When I didn't understand something then I would ask Gabrielle or Bryce to explain the work to me showing that he utilised the group for his interest which was 'not to be the worst again'.

The third group was not as evenly distributed in terms of interaction in the group as the second group, but was equally successful as an apprenticeship learning group. Although Leigh asked questions of both Bryce and Gabrielle, it seems that Gabrielle

did most of the mentoring. However, he recognised the advantages this held for him. He points out:

When I simplified things for Leigh I also simplified things for myself. So the work become easier for me.

He is aware of how talk helped him to organise his thoughts and therefore also mediated his own learning.

Bryce is quite open in his admission that his role was more of an apprentice to Gabrielle than as a journeyman to Leigh.

Gabrielle, um, helped most ... um ... but if he asked me questions I'd answer them. But ma'am, Gabrielle also helped me a lot.

It is the third group that makes some interesting observations about the advantage of an all boys group. They believed that being an all boy group made things easier because

We're all boys it's easier to relate to each other.

They had difficulty verbalising how a group of boys made the learning process easier, but Gabrielle, after a lot of thought said:

We understand each other. We tell Leigh to go eat when he gets home and then do the work, don't go play in the street, because we know sometimes we feel lazy.

He expresses here the advantages to their learning that sharing the same discourse has.

4.5.3. Analysis of learners' exam results.

This class wrote the same exam as the other 9 classes of Grade 9 learners in the school, but whereas the other classes marks dropped about 10% from term 1 to 2, my Grade 9 class average increased by 7% and many individual marks soared. For example, Thokozani's marks improved by a staggering 27% while Clement improved by 25% and Leigh by 24%. All the journeymen's marks also improved by between 2 and 12%.

4.5.4. Analysis of learners' answers to questionnaire.

Tarryn, who had been placed in a group with co-journeyman Sarah (a much brighter learner than either Angie or Jon) and Nash (who had produced good work on occasions but was easily distracted), seemed to demonstrate the greatest change in attitude in her answers to the questionnaire. She made the following response the questions about working in the apprenticeship group:

I found it more relaxing and a little less tense than the first time we worked in groups. It was nice to be able to ask. My marks improved. On the negative side I always had someone looking at my work. I couldn't even do my own thing without being bugged. Sometimes I couldn't answer their questions.

In response to the question about her attitudes towards the work or herself she said:

I can be selfish at times without even knowing it. I realise that I need to listen to others more but I find it hard as they irritate me.

Her inadequacy in dealing with learners of different backgrounds and ability was further demonstrated in her answer to the question about the type of group she preferred to work in. She stated:

I prefer to work with closer and more academic friends. It is much easier to work with them because we are on the same wavelength. We understand what each of us is saying.

Here Tarryn is explaining why her first group did not work as well as the second. I realised when I read her response that being a gifted person has resulted in her being in a very lonely position, as there are so few people operating in her zone of proximal development. It means that she is 'socially disadvantaged'. What she needs to learn in addition to her academic work is social literacy if she is going to be able to operate in the new world of work.

In contrast to Tarryn, it can be seen why Sibongile slipped into the mode of journeyman with ease. In reply to the questions about working in groups she said:

I like helping other people because it makes me feel good. It also gave me a better understanding of the people as well as the work because I had to simplify the work to explain it and that made the work easier for me. On the down side, working in these groups did make the work a little slow.

Sibongile has a well-developed social intelligence that allows her to make the most of any social situation. She also has a balanced outlook on life in that she can see the good and bad of working in the group situation. She recognises the advantages of 'simplifying' the work for her apprentice.

When looking at these two research subjects it seems that the success of group work depends on the composition of the groups and the type of literacy the members of the group possess.

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CYCLE 4

4.6. 'Management' Groups where the Manager was Selected from Weaker Learners and then these Managers Selected their Groups. (Grade 11)

4.6.1. Method for selection of group arrangement.

As some of the Grade 11 learners had benefited from the problem solving process in groups in the first spiral, and the Grade 9 learners had shown improvements in cycles 2 and 3, I decided that cycle 4 would be similar to the previous cycles. However, it seemed necessary to have at least one capable learner in each group, as this had been successful with the grade 9 groups. However, I wanted to avoid the situation as had occurred with some of the grade 9 group, where the capable learner was in a position where he/she was seen as the sole provider of knowledge while the others were passive recipients. I also wanted to avoid the 'bullying' which had occurred within these groups. I, therefore, wanted to change the power relations in the groups.

For these reasons I selected the eight least proficient learners and made them 'group managers'. I did not let them know that I considered them to be less proficient, neither did I give them the reasons why they were chosen. I then let them choose their group members from the rest of the class in order to give them the feeling that they had some control over the process. This I hoped would lower what Krashen refers to as they affective filters and make them more positive about the exercise.

As was expected they each chose one of the most proficient learners first. They then chose a less proficient learner, and so on. The result was that all groups were of diverse ability. RS1 was a group leader, while RS2 and RS3 were not. Although the learners had some choice in the composition of the groups, the selection process was manipulated by the teacher in such a way that none of the weaker learners could choose each other as they each were responsible for their own groups.

I asked the groups to study 4 poems by Douglas Livingstone. I met with the groups' leaders separately and gave them guidelines on how to manage their groups and the process they should adopt in order to analyse the poems. This was the stage of 'explicit instruction'.

The instructions were the following:

INSTRUCTION TO GROUP MANAGERS

Make sure your group completes the following instructions:

1. Each member of the group is to read the poem to be studied silently.
2. Re-read poem underlining words not understood.
3. Discuss these words in the group.
4. Identify the form of the poem. (Rhyme scheme, length of lines and stanzas etc)
5. Underline all figures of speech.
6. Discuss the three steps involved in analysing figures of speech and explain each figure of speech in your group.
7. Each member by themselves to identify rhythm and other sound devices such as alliteration, assonance etc.
8. Discuss the function of the sound devices with the group.
9. Identify the mood and atmosphere and how these are created.
10. Identify tone and which words create this tone.
11. Now each group to decide on the main theme of the poem.
12. Look for pictures or draw pictures to illustrate images, tone, themes and any other aspect of the poem that you feel is important.
13. Once you have completed 1 - 12 for all four poems, create a collage depicting the main characteristics of Livingstones poetry as demonstrated in the four poems you have studied.

I wanted to adopt a Multiliteracies approach, which involved multimodalities.

Therefore, after the analysis stage the groups were asked to produce collages in which they visually presented the dominant images in the poems. Each verbal image had to be accompanied by a relevant picture, which illustrated the image in visual terms. Groups were free to decide how they divided the work among the group members.

4.6.2. Analysis of Data for Management Groups Grade 11 - Cycle 4

4.6.2.1. Analysis of Learners' comments written in response journals.

Most of the feedback that came from the research subjects again related to the dynamics of the groups.

The most interesting data collected from RS1 came some seven months later when he was asked to write a creative essay entitled: 'Discuss how the debates or any one of the networks you studied in your English class affected your outlook on life'. SR1 wrote the following:

Being a foreman in my English class has influenced my life greatly and has definitely brought positive rewards. Through talking and reading in front of the group, class and even standard has made me more confident in the things I do and say. With this confidence my outlook on life has taken a dramatic turn. I feel better about myself and I am now the eternal optimist.

Although the essay is off the topic set for that particular assignment, it clearly demonstrates the unexpected side effect of making him a group manager .

RS2 had the following comments on her group and how they worked:

Having a group manager who read out the pattern to which we were to work helped greatly. The method of going through the steps gave a pattern to the procedure to simplify the poem for us. Working out the poems for ourselves helped us to think more. The group helped us to realise how to explain to some that can't understand. It also helped me to listen to others and to share the workload.

I also think that letting us work on all four poems instead of one main poem gives us a better understanding of the poems. We got to know the way in which a certain poet writes too so this also helps us with our understanding.

RS3 made the following comments about her group. She did not feel as comfortable with her group:

Working in the poetry group with people I don't know was very difficult for me. The other two in my group assumed that they were not 'clever'. Even though Claude was the manager, I felt that any input into the poem was going to be only mine. Sivuyile asked lots of question and insisted on compiling the final product. He had lots of ideas about turning the images into pictures. I thought that was a very good thing, so I eventually gave him my bit and let him put it all together. Claude at first just wrote down everything we said in class, but when it came to dividing the work for homework he did his bit. I received a lot more creative ideas and a lot more input than I would have been able to come up with on my own. I was very surprised.

4.6.2.2. Analysis of Teacher/Researcher's field notes.

I noted that initially the brighter learners in the groups had a problem adjusting to not being the controller of the group.

SR3 initially was uncharacteristically quiet in the group. It looked like she was Trying to work out her new role in the group. Eventually, when the other two couldn't come up with the answers she began participating, reluctantly at first.

However, once it was obvious that the 'managers' were only facilitating and did not have the answers to the questions around the poems, they became more co-operative.

Once work was under way in SR3's group she began trying to control the process but her manager quickly pointed out that he was the one who must guide the group following the specific order he had been given.

SR3 was the most 'put out' at having to listen to her manager. It was interesting to note her surprise as her partners came up with ideas about not only the analysis of the poem, but also ideas about the types of images that could be used. It was their idea to use cardboard in the shape of Africa for the collage.

As time went on SR3 began to listen more to the other two in her group and allow them access to the process of analysis and creation of the poster. As I wrote in my notes on the second day of the cycle:

I was surprised today when SR3 actually listened to her manager and then asked him: 'How do you think this links to the poem'. I didn't hear his answer but I was delighted when I heard her respond: 'I see, I suppose we could try that'.

She did this rather grudgingly at first, but in the end she said in her questionnaire that she was pleased and surprised with the result.

SR2 didn't object as much to not being a leader as she is a very practical person and usually listens to her group.

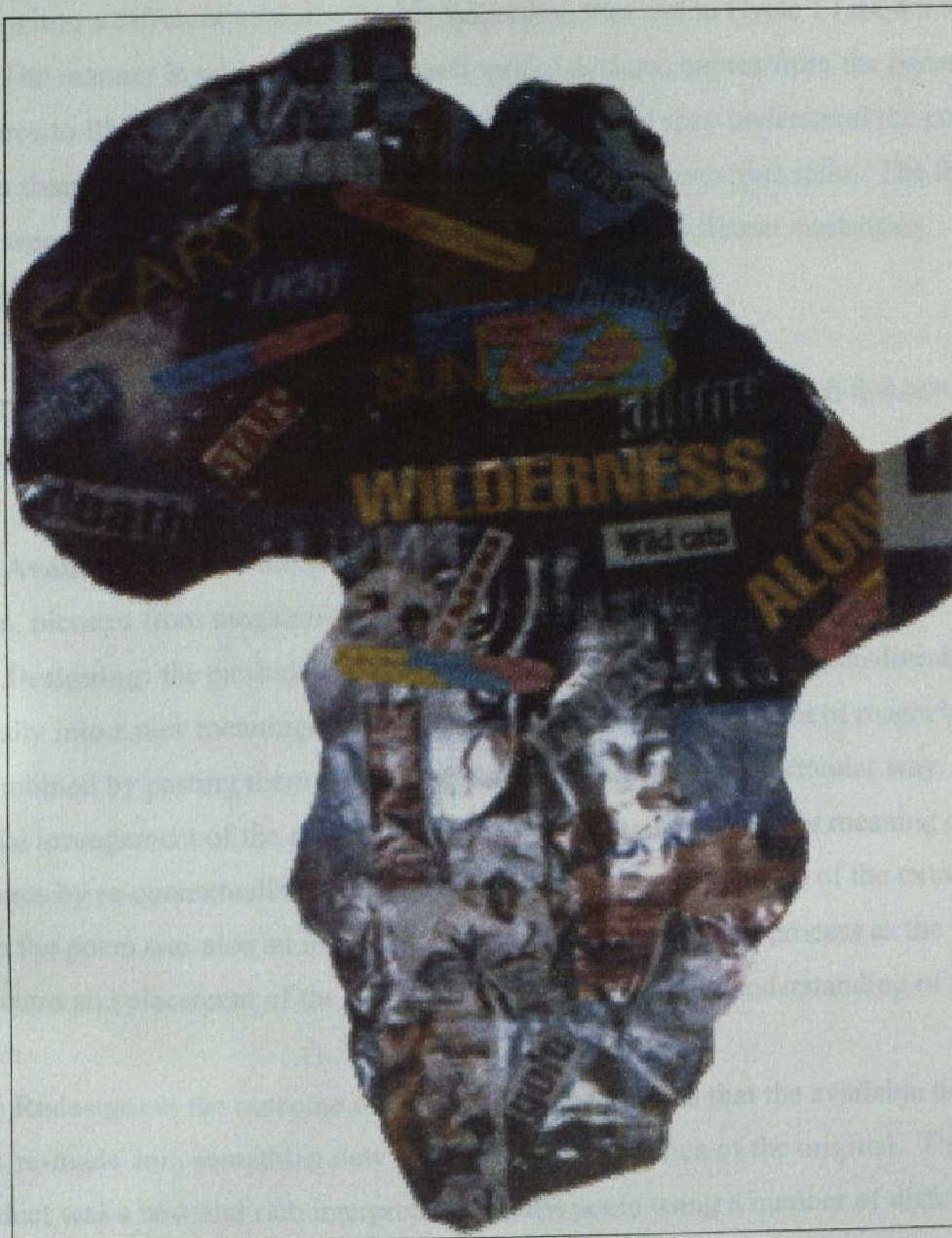
SR2 settled to work quite quickly with her group. She made an effort to allow her manager to finish his instructions before she came up with her suggestions. She had quite a forceful manager, but they didn't come into conflict about who was controlling the group as she felt that the way they were working was effective and went along with it.

SR1 seemed quite confident leading his group.

SR1 had obviously planned how he was going to approach his new position. He arrived with his notes and started by telling his group that he had a specific order in which task was to be approached and that he would give them the instructions one at a time. He allocated one of the members as a scribe. I was impressed at how organised he was.

I was very surprised when I read his essay some seven months later in which he expressed how nervous he was at having to talk in front of the group.

4.6.3. Description and comments of learners textual products.



The research subjects demonstrated through the production of posters like the one above, the ability to redesign the meaning of the poem into other modalities. They managed to transfer the meaning made out of the poem into pictures and to arrange this meaning spatially so that it made sense. This group included one of the Livingstone poems called 'Africa'. They communicated this by making their collage in the shape of Africa.

The research subjects showed a better understanding of how to redesign the available design into a different modality in this spiral than they did in Cycle 1 (see 4.3.3. pg. 32). The manner in which they used both spatial designs, quotes from the poems and pictures to illustrate meaning was a clear indication that they understood the poems better than they had understood the poems studied in the previous spiral. The fact that they were able to communicate this understanding using different modalities confirmed this understanding.

In terms of the Multiliteracies framework of Design, the way in which this text was created may be described as follows:

The Available Design: the available meaning-making resources were the text of the poem, pictures from magazines and A3 pieces of cardboard.

The Designing: the cardboard was cut into the shape of Africa thus transforming it visually into a new meaning-making resource. Pictures were cut out of magazines and recombined by pasting them onto the re-formed cardboard in a particular way. The spatial arrangement of the pictures on the cardboard transformed the meaning of the pictures by re-contextualising them. The selection and arrangement of the extracts from the poem was also an important part of the transformation process as the selection and placement of the quotes re-created the learners understanding of the poem.

The Redesigned: the outcome of the 'designing' stage was that the available design was 're-made' into something new and unique, not a replica of the original. The product was a new and rich interpretation of the poem using a number of different modes such as spatial, visual and linguistic modes.

4.6.4. Reflection on the findings of Grade 11 group - Cycle 4

SR1 seemed to benefit greatly and unexpectedly in this spiral from being made a group manager. It was so significant to him that in the next academic year he was writing about it in his essay. There had obviously been an improvement in what Gardner describes as his inter-personal intelligence or social literacy as he was able to interact better with others, as well as his intrapersonal intelligence as he understood his own ability better and in so doing, he had a better understanding of himself.

SR2 recognised the benefits of what The New London Group refer to in the Multiliteracies pedagogy as Situated Practice as she felt that 'working out the poems for ourselves helped us to think more'. She was also aware that the element of Overt Instruction was an important part of the pedagogy as she mentions how she benefited from the 'pattern to the procedure to simplify the poem'.

RS3 who is the top performer of the three research subjects felt the least comfortable working in the strange groups. She had only ever worked with top performers in the past and this experience obviously brought about the greatest change in her attitudes. She assumes that the other two in the group would expect her to provide all the information.

The interesting thing was that this was only *her* perception and in fact the other two in the group contributed very handsomely when they understood exactly what was required of them. She didn't seem to realise that the fact that 'Sivuyile asked lots of question' was an indication that he *was* in fact contributing as he was attempting to gain the information necessary for him to begin the project. She also missed the fact that when 'Claude at first just wrote down everything we said in class' he was gaining the necessary input, what Krashen would describe as 'comprehensible input' in order for him to make a contribution later, which he undoubtedly did. She writes: 'when it came to dividing the work for homework he did his bit.' It seems that RS3 benefited most from this spiral in terms of her interpersonal intelligence as she learned to work with learners of different gender, race and social background. She grudgingly admitted that 'I received a lot more creative ideas and a lot more input than I would have been able to come up with on my own'.

CYCLE 5

4.7 'Expert' groups - learners selected own groups and then one from each group was allocated to an expert group in order to bring specialised information to the 'home' group. (Grade 11).

4.7.1. Method for selection of group arrangement.

Aronson et al. (1978) developed a co-operative approach to small group work by developing what they called the 'jigsaw'. In this group interaction between groups is also considered. The class is divided into a number of base groups and each base group is assigned the same task. Each group member within a base group is assigned a sub-task. Within the class, all pupils assigned the same sub-task are asked to work together and learn about their sub-task in expert groups. Pupils then return to their base groups to teach their sub-task to other base group members. Aronson found that this model produced increased academic achievement when compared to normal class groups along with more positive attitudes to school and improved self-esteem.

Because requiring all learners to study all poems was such an arduous task and because I wanted to spread the responsibility in the group more evenly, I decided that for this phase jigsaw groups would be adopted. This was another way of ensuring that the expert groups were diverse without 'forcing' the learners into such groups. In this phase learners were allowed to choose their own 'home group' of five members each. Each of these groups were asked to read the next 5 poems and as a group worked out rhyme schemes and form. I made this addition to the model, as I wanted all members to have read all the poems before they were separated into their expert groups. This was so that they had some idea of the poem they were to become 'experts' on and have some choice as to which poem they wanted to select. Each member of the group then had to each choose one poem to become an expert on.

At this stage all the learners studying poem 1 moved into a group, all those studying poem 2 moved into a group and so on. These are referred to as expert groups as the learners had to become experts on their poem so that when they returned to their 'base groups' they could 'teach' their poem to their group. Because the learners had chosen their base groups, the expert groups were diverse as the top learners had grouped

together for the base group and when they divided into expert groups one of them were represented to each expert group.

This seemed to be the best way of creating diverse groups as the learners had chosen the original groups and did not feel that they were being forced in any way and were therefore less resentful.

Once the learners had analysed their poem in the expert groups they returned to base groups and shared their knowledge about the poem. Weaker learners who were asked questions they could not answer by their base group were free to return to members of their expert group for 'back-up'. The follow up exercise involved each group writing an essay on one of the five poems they had learnt.

4.7.2. Analysis of Data for Jigsaw Group Arrangement - 5 Grade 11.

4.7.2.1. Analysis of Learners answers to questionnaire on the effectiveness of group arrangement.

Learners were asked to respond to the following questionnaire:

1. Did you find the jigsaw group arrangement had added benefit to the management group arrangement?
2. If yes, list ways in which this group arrangement helped you.
3. List any problems you encountered in working in these groups.
4. Make suggestions on how this group arrangement could be improved.

SR1 found the base group most useful he writes:

I found the base group most useful. This group helped to put the essay together and to edit it and make sure everything was right. The expert groups helped with the gathering of information but they were more interested in their own essays. There wasn't much interest in making each other's essays good.

Even though I had worked very hard to establish a sense of team work in both classes the spirit of competition prevailed. In the base groups marks for the final essay was shared, therefore all had a vested interest in the performance of the whole group. However, when it came to the 'expert' group, no marks were allocated. I would seem that this effected the interest in the performance of other members of the group. Self-interest seems to be what is driving the learners, and as it is not in the interest of

members of the expert groups for other members of that group to produce a good essay, they are not interested in assisting.

The main problem that SR1 found with the group arrangement was the following:

The problems arose when one person in the group was absent because then the others have to do all the work.

This is a real problem when working in my site where transport problems and lack of home support results in frequent absenteeism. There is also here a sense of self-interest resulting individual members doing work they wouldn't normally do. The individual members resented having to do more work than others in the group, but the fact that *not* doing the work of absent members would result in them not scoring well on the group task forced them to do the work. This, however, resulted in a great deal of resentment.

SR2 felt more at home in the base group as well.

In the base group we were working with our friends. We know each other well and we all work well together. When we moved into expert groups some of the people from the other groups expected us to do the work for them. Some of them weren't as interested in the work and talked about other things which was distracting.

Here again is evidence seen in the Martin's grade 9 group. (See cycle 2). Learners feel more comfortable working with people they knew, understood and could relate to.

In response to the invitation to make suggestions on how this group arrangement could be improved SR2 suggested the following:

I think that we should have some say as to who is in our expert groups because it is very difficult to work with people who don't contribute and I don't think it is fair that we should give them all our ideas when then don't have any useful ideas of their own to share.

I also felt that the base group and the home groups were too big so a lot of kids were free riders.

SR3 felt differently. She wrote:

I felt that the system worked well. By being the only one sent from the base group to your expert group you sort of felt responsible to learn as much as you could in the expert group to take back to your friends. We all helped each other in the base group to organise the ideas we had got from the expert groups and this helped us all to learn how to structure the essays.

SR3 had no problems with the system.

From the comments of the three research subjects it seems clear that working with friends makes a big difference to SR1 and SR2. It is possible that an additional factor was that the base groups had a vested interest in its members performing well as they had to produce joint work and share marks, whereas the expert groups were merely set up so that the learners could become experts in their poem. No marks were awarded or shared by these groups. This is possibly why they were not as helpful to SR1 and SR2.

Another problem when working with a large class is that if the base group consists of five learners this means that when they are put into expert groups there are seven learners per group which makes control difficult and as SR2 pointed out, there is then room for 'free riders'.

SR1 felt that her home group 'helped a lot to put the essay together and make everything sound right' because they had a shared interest in the final products because they were sharing their marks for the essay.

4.7.2.2. Analysis of Teacher/Researcher's Field Notes.

This was the most difficult of the group arrangements to set up. I wrote in my notes on the first day:

I was surprised how difficult this arrangement was. When I asked my learners to divide themselves into groups of five there was chaos as learners shouted across the room and fought about who was to be in which group. I had also not taken into account the class comprised 38 learners which meant that there were 7 groups of 5 and then a 'left over' group of 3. Unfortunately, the learners who were not wanted in the other groups ended up in this group. They were very uncomfortable and never really got started on their essay. This took 10 minutes of my 70 minutes double lesson.

When I had arranged to groups for the previous cycles I had maintained some control except in the selection of the 'self-select' group in cycle one. However, the difference was that these 'self-select' groups had comprised only three learners each which made a big difference to logistics. This time I had left the selection entirely up to the learners. I found this counter productive as, apart from the noise and the time wasted, I was unable to protect learners who were unpopular or who didn't have special friends in the class.

After the learners had spent 15 minutes of the initial base group task, I then asked them to decide which poem each of them was to become an expert in. This took a while as there was lack of consensus in some groups as to how the poems should be distributed. I then asked them to move into expert groups. This caused more mayhem as the whole class had to move again and desks and chairs were shuffled and learners were not all clear about where they should go. This wasted another 10-13 minutes. However, once learners were finally settled into their expert groups things settled down and groups worked reasonably productively.

When I use this process again I will have to work on the logistics of the exercise. I found that the arrangement involved too much moving around which was very disruptive and time consuming.

4.7.3. Reflection on the findings for Expert Groups - Cycle 5 Grade 11

Although I believe that a great deal of practice is needed to organise and manage this arrangement, I do believe that in the end the learners benefited from the arrangement. Once the learners get used to how the arrangement I suspect that the organisation will run more smoothly.

What I felt was most useful about the jigsaw approach was that every learner was responsible for his or her contribution to the base group. Valuable mediation took place in the base groups. This was motivated by the group interest. I want to find ways to motivate the expert groups to operate in a spirit of community instead of simply wanting to get information out of the group. Some of the groups worked better than others. A great deal depends on the relationship between the members of the groups, particularly on how well they know one another.

Possibly the reason why the expert groups didn't work as well as the other diverse group cycles was because all members of the expert group were given the same task so that their diversity was not accessed.

CYCLE 6.

4.8. Grade 9 Learners were given a choice whether they should work in groups or not, and which groups they should work in.

Learners were given a choice whether they should work in groups or not, and which groups they should work in. Learners were given a choice of topics surrounding the background to Shakespeare. The instructions were as follows:

Research one of the following topics and then prepare a visual which can contain writing, pictures, a model or combination of the three. Your text should demonstrate what you have found out about your topic. You will be asked to present a talk in class using your visual as an aid.

1. Fashion during the Elizabethan age.
2. Architecture of the time.
3. The Globe Theatre.

Learners could chose whether they wanted at this stage to work alone or whether they wanted to work with their group or with members of other groups. I wanted to see if they had changed their attitudes about working in groups.

4.8.1. Collection of Research Data for Cycle 6

4.8.1.1. Learners' texts.

Learners brought models and charts that they had made. The models of three of the learners involved in cycle two research groups were photographed. These learners were Tarryn, Sibongile and Martin.

They filled in the following questionnaire on how they had gone about making their visual aid and why they had chosen either to work alone or with a partner:

1. Did you choose to work alone or with your group?
2. Give a reason for your choice.
3. Which visual did you choose to make?
4. Why did you choose this particular one?
5. What materials did you use?
6. What did you learn from creating this visual ?
7. Having seen all the other projects, from which one did you learn the most?

4.8.1.2. Teacher/Researcher's Field Notes.

Learners seemed to find this project fun maybe because they had the opportunity to work with a medium other than the written word or maybe because they could choose whether or not to work in groups and which groups to work in. Either way, they launched into the task with great enthusiasm.

Once the learners had organised themselves into groups, pairs or had started working on their own they were very productive, except for Tarryn who preferred to read a book in class as she told me she was doing her work at home.

The first and most important issue for Tarryn was that she should work alone. She made it quite clear to her group that as this was for marks she felt that she wanted to work alone.

Tarryn told her group that she wanted to work alone because the task was for Marks and she didn't want the hassle of having to make sure the others did their work.

None of the others objected, but allowed her to do her own thing.

Jon happily wandered off to his old friends and reverted to his previous habit of doing very little. Angie joined another group, which contained some of her friends and worked happily as a member of the group following the instructions of the girl who became the natural leader of the group.

The response of the second group was more encouraging.

Sibongile and Sylvia chose to work together and were more than willing to work with Martin. Mpho had moved off to another group where she was the leader. But Martin made it quite clear that he wanted to make a model and that it was a 'boy' thing and he would rather work with some of his male friends. Nevertheless, Sibongile and Sylvia elected to work together. The group split up without any animosity, the girls seeming to understand Martin's need to be with his friends and Mpho being needed by the other group.

It seemed that although Martin had established a working relationship with the girls in cycle 2, when given the chance the attraction of working with people he knew was difficult to resist.

Martin and his friends worked enthusiastically in class, each bringing material and working noisily together, as great debates raged about the construction of the model from a picture and description in a book one of the other members of the group brought.

Tarryn remained a loner throughout this cycle. I was disappointed as I thought that she had gained something from cycle 2 and 3. I noted:

Tarryn did very little work at school and was very secretive about her project. (I suspected that she was getting a great deal of help at home). Sibongile and Sylvia did some of the work in class, Sibongile always taking the lead. After the initial phase of

cutting and pinning material, Sibongile took the dolls and material home and did the sewing.

4.8.2. Analysis of Data - Cycle 6

4.8.2.1. Analysis of the learners' answers to the questionnaire.

Tarryn decided to work alone on her globe theatre project. She gave the following reasons for doing so:

I wanted to work alone because then I don't have to depend on them to do things for me and then not have it done. I could work on it whenever I wanted. I could do what I wanted with the project. I didn't have to worry whether they were doing their work or not.

From these comments it can be deduced that Tarryn may be 'academically intelligent', but that she lacks the intelligences Gardner describes. She certainly demonstrated that she needs more interpersonal intelligence if she is to be successful in the new world of flattened hierarchies described by the New London Group.

Martin, who worked with two other boys rather than the girls from his original group, had a different idea about working with a group when he created the Tudor house. He maintained:

I worked with my group because more work could be done faster. We all had different ideas and if you put different good ideas together it makes a better project. We were also able to pool our equipment, which meant that we had more material.

Martin has a good notion of the function of the group in getting the job done. However, he seems to have very fixed ideas about gender and the types of jobs which should be reserved for boys. It didn't seem to occur to him that the girls might have been able to build a model just as well as the boys. Although he demonstrates gender prejudice, he worked just as well in both the group with the girls in the previous spiral and in the group with the boys in this spiral. Martin just needs to shake off his perception that it is easier to work with boys than it is with girls.

Sibongile, who was more than happy to accept Martins decision to work with the boys, decided to work only with Sylvia because they had got to know each other in the first cycle and had worked well together. As they were both girls they decided to work on a 'girl project' which involved Elizabethan Fashion. She commented:

It would be useless to include a boy in our group as we were making clothes for our models. I chose to work with Sylvia because we had become friends since working together on the newspaper and because she could help me to sew. She could pin while I cut and so on.

It would seem that it was gender and not race which had made this group uncomfortable working together at the beginning of the first spiral.

To the question, which asked why they chose their particular project, all answered that they chose it because it was something they were good at making. Only Tarryn mentioned that she was looking for a challenge. The other two said that they enjoyed working with the medium they had chosen.

All three research subjects felt that they learnt more from other projects than from their own. This surprised me, as it was not the case with the poetry project done with the Grade 11s. This was possibly because the Grade 9's were working with three-dimensional models which made meaning more explicit, while the Grade 11s had stuck mainly to words.

4.8.2.2. Analysis of the Teacher/Researcher's Fieldnotes.

Tarryn's reluctance to work with others and her secretive behaviour reflects her highly competitive nature, which makes it hard for her to work with others. She is a learner who receives a lot of support at home and her parents' emphasis not only high grades, but that she must be top of the class. It was therefore difficult for her to reconcile her parents' value system with the value system of working together and sharing that I was trying to instil in my learners.

Although Jon learned a lot in the first spiral when working with the group, he still could not function productively without their input and discipline. It seemed that it would take more than one cycle to change his attitude and to instil a stronger work ethic in him. I suggest that he was still subject to peer pressure, which is so prevalent in Eldorado Park.

Martin seems much more comfortable working with boys and has obviously not had much experience working with girls. When I asked him about his family I found that he comes from a family of three boys. He had little experience of working with girls, as there were no sisters in the home to bring home friends that he could mix with.

Sibongile is a natural leader who is gregarious and sensitive and would never have 'dropped' her group. She worked well both with Thokozani and with and without

Martin in the group. She chose to do a 'girl thing' because Thokozani had become a journeyman and Martin had opted out of the group. When I asked her if she would have been happy to have the boys in the group she said that she would have simply adapted the project to something they all felt comfortable with.

4.8.3. Description and comments on learners' textual products.



It is fascinating that Martin, who had produced the newspaper text with the girls in cycle 2, should produce the above text when working with his boy friends. What is so remarkable is that this text contains no words at all even though the instructions stated that the text must communicate information about the subject in the form of writing, pictures, a model or combination of the three. I hypothesise that the reason that this is so is because he and his friends share the same interests and intelligences which lean towards the visual and spatial. It must be remembered that in cycle 2 Martin was responsible for the visual representation of the pearl dealers as vultures thus setting up a visual metaphor.

I suggest that Martin displays what Gardner (1983) described as Spatial Intelligence which refers to the ability 'to perceive the visual-spatial world accurately and to

perform transformations upon those perceptions'. This intelligence includes the 'capacity to visualise, to graphically represent visual and spatial ideas.'

In terms of the Multiliteracies framework for Design, the above textual product may be described as follows:

Available Design: picture of a Tudor house in a book, matchsticks, pieces of black and white paper, cardboard and glue.

The Designing: the two-dimensional picture of the Tudor house was used as a guide to create a plan for three-dimensional house. The matchsticks were pasted together into a frame. Cardboard was cut into pieces to cover the frame. Black and white paper was pasted onto the cardboard to create the impression of the Tudor house.

The Redesigned: all the above-mentioned material was transformed into a stunning model of a Tudor house. It was not a replication of the picture as it was three-dimensional. The matchsticks, paper and cardboard were transformed into the walls, windows and roof of the house. The detail was a perfect spatial and visual model reflecting Martin and his team's spatial intelligence.

4.8.4 Reflection of findings for Cycle 6.

It seemed to me that although the first two ALG projects with the grade 9s had appeared to be a success, this was not entirely true. They worked well in the ALGs when the teacher persuaded them to and as a result created interesting textual products and seemed to establish diverse social relationships. As far as the ALGs were concerned these learners needed to be encouraged more to work in diverse groups because they had not all 'internalised' the fact that working in the groups had been beneficial, even though they had seen the results and verbalised that they had benefited. When given the option they had mostly gone back to their friendship groups or opted to work alone as they had in the past. Therefore, what had seemed a breakthrough in building working relationships across gender, race and other difference was not significant enough to encourage the learners in this age group to select to work in such group arrangements.

As far as the texts produced is concerned, it can be seen from the text produced by Martin's boys group that homogeneous groups are inclined to produce less multimodal texts than diverse groups. Although the text produced is of excellent quality it lacks

any verbal aspect. I hypothesise that had these boys been spread through the other groups they would have provided the spatial and visual expertise and other members of the group would have added other intelligence and therefore modes, thus producing a much richer product.

CHAPTER FIVE

5. CONCLUSION AND RECOMMENDATIONS.

I am going to draw conclusions and make recommendations relating to the use of ALGs in diverse classrooms. I will also make suggestions about the relationship between the use of ALGs combined with aspects of a pedagogy of Multiliteracies and the Outcomes Based Approach required by Curriculum 2005.

I discovered from my research project that working with Apprenticeship Learning Groups (ALGs) is extremely complicated and intricate. For ALGs to support literature learning I claim that the following factors should be taken into consideration at two levels:

a) At the level of social relations within the ALG:

- power relations
- gender relations
- race relations
- attitude changes which occur as a result of the interaction in the different ALGs
- the positive and negative effects of friendships in ALGs
- the importance of grouping compatible personalities.

b) At the level of the learning task which is set:

- most importantly, learning tasks should be designed that will tap into the resources of *all* members of the ALG. To do this, the task should be multimodal so that each member of the group has an opportunity to use their dominant literacy.

I also discovered that there is a strong relationship between an ALG approach combined with aspects of a Multiliteracies approach and the Outcomes Based approach required by Curriculum 2005 in that all the Specific Outcomes required by Curriculum 2005 can be demonstrated using the ALG/Multiliteracies approach. I will expand on this in 5.6.

I present my findings on two levels - firstly I will present a claim which I have extrapolated from the research, and secondly I will suggest the implications of this claim for teaching.

5.1. The Value of changing Power structures in Apprentice Learning Groups.

5.1.1.Claim

The research findings in this report provide evidence for the idea that shifts in power relations in ALGs can change learners' sense of self-esteem and identity in a positive and negative way.

5.1.2. Implications for teaching

Power relations in ALGs need to be shifted in order to allow learners who do not perceive themselves as leaders or who have never been given a chance to be leaders, to take on a leadership roll. For example, RS1 in cycle four had never been considered a leader either by himself or by his teachers or peers. However, when he was given an opportunity and the necessary support, the experience changed not only the perception of others and his perception of himself, but also changed his 'entire outlook on life'. (See Chapter Four, Cycle Four).

It is also important for learners who are used to taking on the leadership role automatically to stand down on occasions and experience group or team work from the perspective of a 'follower'. This exposes them to how ALG work is experienced by the people they normally lead and what it is like not to have the power they usually enjoy. The result in cycle four was that RS3 was more open to opinions of other learners she previously would have overruled, because these learners were now in the position of power. She listened to their contribution and was surprised at the value of the contributions the previously 'disadvantaged' members of the groups made. This made her sensitive to the value of these members of the group and as a result changed her leadership style. Thus by changing power structures in ALGs, different learners are given a stake in the learning process and in this research project it was found that these 'voices' had something valid and important to say.