

CHAPTER SEVEN

Cross-Case Analysis: Convergences and Divergences?

We need to be positive¹

I think I must resign²

In the previous two chapters I analysed each case study separately, that is, I conducted a ‘within case analysis’. In this chapter I intend to conduct a cross-case analysis of these two teacher cases. My objective is to compare the cases systematically to see what insights each case generates in terms of each teacher’s understandings and beliefs relating to the new assessment policy, and the teachers’ assessment practice in the classroom. Through this cross-case comparison, I seek to juxtapose the two complex cases in search of patterns that illuminate the relationship between policy and practice in the context of assessment policy change.

This cross-case analysis is designed to address the three overarching research questions of the study:

- 1. What are teacher understandings and beliefs with regard to the assessment policy?**
- 2. In the context of official policy, how do teachers practice assessment in their classrooms?**
- 3. How can the continuities and discontinuities between the official assessment policy and the teachers’ assessment practice be explained?**

In this chapter I respond to the first two questions, and shall respond to the third question in the next chapter. The two previous case studies generated rich data that allowed me to provide preliminary responses to the two research questions. But this cross-case analysis will not only serve to compare these findings, but more importantly it will enable me to test my propositions about ‘deep change’ articulated in the initial chapters of this thesis.

¹ Quote from part of Dinzi’s interview

² Quote from part of Hayley’s interview

**A Comparison of Personal, Professional and Contextual Factors:
Teacher Dinzi and Teacher Hayley**

I shall compare the personal, professional and contextual differences between Dinzi and Haley. I believe that these personal, professional and contextual factors are fundamental in understanding teacher actions as they provide a backdrop to their pedagogical work and its location within the assessment policy framework. I intend to describe the significance of these factors and their differences in the next chapter.

Dinzi is a forty-year old, Black African, Xhosa-speaking, female, level one educator/teacher with fifteen years teaching experience in the same school called Delamani High School located in a Black township, while Hayley is a twenty-eight year old, White, Afrikaans speaking, female, level one educator/teacher with six years teaching experience in the same school called Higgins High School located in an urban area still inhabited mostly by Whites. Dinzi is a formally qualified teacher holding a Junior Secondary Teacher's Diploma in Science and Mathematics obtained from a college of education in the former homelands in 1977, as well as a Bachelor of Arts degree with majors in Psychology and Sociology obtained from a university in the former homeland in 1985. Hayley is also formally qualified holding a Higher Education Diploma obtained from the University of Pretoria in 1996 as well as a Bachelor of Science Degree with majors in Zoology and Physiology obtained from the same university in 1995. Dinzi has taught Grade 8 and Grade 9 Mathematics for the past fourteen years, while Hayley has taught Grade 8 Mathematics for 1 year, Grade 10 Physical Science for 2 years, and Grades 10, 11 and 12 Biology for 5 years. Both Dinzi and Hayley are currently teaching only one Grade 8 Natural Science class, although for Dinzi this is the first time that she is teaching this learning area, while for Hayley it is her second year of teaching this learning area in this grade. Dinzi currently also teaches Mathematics to three Grade 9 classes, and English to one Grade 9 class and to one Grade 10 class, and is also the class teacher of Grade 10 A. Hayley currently also teaches Biology to two Grade 10 classes, Biology to two Grade 12 classes and is the Mentor Teacher to one Grade 12 class, and is the class teacher of Grade 12 D. Dinzi teaches thirty periods per week while Hayley teaches thirty two periods per week although both enjoy ten periods of non-teaching time per week. With regard to extra-curricular activities, Dinzi is a member of the Sports, Library and

School Uniform Committee, School Development Team, School Governing Body, and School Assessment Team while Hayley is a coach and organiser for athletics and netball. As far as training for the new curriculum and new assessment policy is concerned, Dinzi has received general training in outcomes-based education, in Grade 9 Mathematics, none in Grade 8 Natural Science, and very little in assessment specifically, while Hayley has received general training in outcomes-based education, in Grade 9 Natural Science, in Natural Science but at a very general level, and very little on assessment specifically. Dinzi's Grade 8 B (observed class in this study) is constituted of fifty Black African, formally registered students (although this number was not present in all observed lessons; the number observed varied between a minimum of twenty eight to a maximum of forty two). Haley's Grade 8 D (observed class in this study) is constituted of thirty-three students of which thirty are Black African, two are White and one is Coloured. Dinzi teaches all her classes in a normal classroom that is small, under-resourced and educationally uninspiring, while Hayley teaches her classes in a science laboratory that is spacious, well resourced and educationally inspiring. Dinzi used two old and outdated science textbooks, namely, "SEP – Physical Science Std. 6" dated 1980-1985 and "General Science in Action Std. 6" dated 1984, while Hayley used a new science textbook titled Natural Sciences for Grade 8: Learner's Book. 2000. The Learning Station Series by Roodt, Whitlock, Wessels & Ray. Haley's students also use the same book while Dinzi's students have no textbooks.

The school, Delamani High School where Dinzi teaches, has forty professional staff consisting of thirty-nine Black African, and one Indian, and six non-professional staff, and one thousand and seventy three Black African students, while the school Higgins High School where Hayley teaches, has forty two professional staff consisting twenty six White, four Black Africans, four Indians, and three Coloureds, and thirteen non-professional staff, and eight hundred and seventy seven students, made up of 75% Black African, 20% Whites, 3% Indian, 2% Coloureds. Dinzi's school operates two time tables, one for Mondays to Thursdays, and another for Fridays; school begins at 08:45 from Mondays to Fridays, and ends at 14:05 from Mondays to Thursdays, but ends at 13:00 on Fridays. Hayley's school operates three time tables, one for Mondays, another for Tuesdays and Thursdays, and another one for Wednesdays; lessons begin at 07:30 and ends at 14:00 from Mondays to Fridays, and each day

starts with a ten-minute staff meeting from 07:20 to 07:30 in the staff room chaired by the principal. This information is tabulated in the following pages.

A Table Comparing the Personal, Professional and Contextual Factors of Teacher Dinzi and Teacher Hayley

	Dinzi	Hayley
Age	40 years	28 years
Race	Black African	White
Gender	Female	Female
Level	Level One	Level One
First language	Xhosa	Afrikaans
Qualifications	Junior Secondary Teacher's Diploma in Science and Mathematics from a college of education in Transkei, a former homeland in 1977 Bachelor of Arts specialising in Psychology and Sociology from a university in Transkei, a former homeland in 1985	Higher education Diploma from the University of Pretoria in 1996 Bachelor of Science with majors in Zoology and Physiology from the University of Pretoria in 1995
Current formal studies	Further Certificate in Outcomes-Based Education at a provincial university and funded by the provincial department of education	No
Teaching experience	15 years Grade 8 and 9 Mathematics for 14 years	6 years Grade 8 Mathematics for 1 year Grade 10 Physical Science for 2 years Grades 10, 11 and 12 Biology for 5 years
Experience in teaching Grade 8 Natural Science (New curriculum)	Nil.	1 year
Number of Grade 8 Natural Science classes presently teaching	1 (out of 4): Grade 8 B	1 (out of 6): Grade 8 D
Other Learning Areas/Subjects teaching this year	Mathematics: Grade 9 – 3 classes English: Grade 9 – 1 class English Grade 10 – 1 class	Biology: Grade 10 – 2 classes Biology: Grade 12 – 2 classes Mentor Teacher Grade 12 – 1 class
Class Teacher	Grade 10 A	Grade 12 D
Number of teaching periods per week	30	32
Number of non-teaching periods	10	10
Training in new curriculum and assessment policy (note where provided it was extremely limited)	General in outcomes-based education Grade 9 Mathematics None in Grade 8 Natural Science None on assessment	General in outcomes-based education Grade 9 Natural Science General on Natural Science Very little on assessment
Extra-curricular activities	Member of Sports, Library and School Uniform Committees, School Development Team, School Governing Body, School Assessment Team	Coach and organiser for athletics and netball
School	Township – Delamani High School with Grades 8 to 12	Urban – Higgins High School with Grades 8 to 12

	Dinzi	Hayley
Distance from home to school	9 kilometres	9 kilometres
How travel to school	Taxi	Own car
Staff composition	40 professional staff – 39 Black African, 1 Indian 6 non-professional staff	42 professional staff – 26 White, 4 Black Africans, 4 Indians, 3 Coloureds 13 non-professional
Student composition	1073 – all Black African	877 – 75% Black African, 20% Whites, 3% Indian, 2% Coloured
School building	Drab	Attractive
School time table	2 time tables in operation School begins at 08:45 from Mondays to Fridays School ends at 14:05 from Mondays to Thursdays, but at 13:00 on Fridays	3 time tables in operation School begins at 07:30 and ends at 14:00 from Mondays to Fridays
Number of students in observed Grade 8 Natural Science class	50 (although this number was not present in all observed lessons; between 28 and 42 observed) All Black African	33 regularly present in all observed lessons 30 Black African, 2 White, 1 Coloured
Classroom where lessons observed	Normal classroom that was uninspiring and unattractive	Laboratory that was very inspiring and attractive
Textbook used by teacher	Two outdated textbooks, namely, “SEP – Physical Science Std. 6” dated 1980-1985 and “General Science in Action Std. 6” dated 1984.	<u>Natural Sciences for Grade 8: Learner’s Book</u> . 2000. The Learning Station Series by Roodt, Whitlock, Wessels, & Ray.
Textbook used by students	No textbook	<u>Natural Sciences for Grade 8: Learner’s Book</u> . 2000. The Learning Station Series by Roodt, Whitlock, Wessels, & Ray

In the next section I examine, compare and contrast Dinzi's and Hayley's understandings and beliefs with regard to the new assessment policy, in response to the first research question given above.

A Comparison of the Understandings and Beliefs with regard to the new Assessment Policy of Teacher Dinzi and Teacher Hayley

I draw on information from the questionnaires (A1 for Dinzi; B1 for Hayley); free writing schedules (A2 for Dinzi and B2 for Hayley) and interviews (A3 for Dinzi; B3 for Hayley) to construct the comparative analysis of their understandings and beliefs with regard to the assessment policy.

I shall first examine and compare each one's responses to the Questionnaires (A1 and B1) about each one's understanding and beliefs about the policy. I first compare their understandings of the policy followed by a comparison of their beliefs about the policy.

A Comparison of their Understandings of the Policy

While Dinzi claimed that the assessment policy was easy to understand, it provided easy guidelines for implementation, and it allows for flexible implementation, Hayley claimed that this was not so. The question that emerges is: Why are the responses different and how would the difference influence each teacher's assessment practice?

Both Dinzi and Hayley are in full agreement that the policy makes recording of assessment data cumbersome, and that it provided a clear indication about how well every outcome in the learning programmes are being taught and learned.

Both agreed that the policy provides the pedagogical basis for our new education and training system (although Dinzi strongly agreed), that assessment should be an integral, ongoing part of the learning process (Dinzi strongly agreed), that the specific outcomes, which are grounded in the critical outcomes, will serve as the basis for assessment, that learners who do not meet the criteria must receive clear explanations with an indication of areas that need further attention, focusing on formal tests as the

sole method of assessment should be avoided (Dinzi strongly), creates opportunity for feedback to learners to improve learning, informs and improves the assessment practices of educators (Dinzi strongly), makes it possible for results to be reported both informally and formally, and it allows for the assessment of knowledge, skills, values and attitudes. These responses invoke the question: Do these statements find expression in their deep understanding of the policy and in their classroom practice?

They differed on a number of factors relating to the policy, for example, Dinzi strongly agreed that the purpose of assessment should always be made clear to the learners but Hayley was not sure; Dinzi agreed the criterion-referenced approach should be used while Hayley was not sure; Dinzi agreed the various specific outcomes and their assessment criteria must be available to learners while Hayley disagreed; Dinzi was not sure that teachers have no problems implementing the new assessment policy while Hayley disagreed; Dinzi agreed that it enables assessment results to be communicated clearly, accurately, timeously and meaningfully but Hayley disagreed; and Dinzi agreed that it allows the internal assessment process to be moderated externally in accordance with specific provincial guidelines but Hayley disagreed. These responses elicit the question: Why do they differ and how will these differences influence their deeper understanding and implementation of the policy?

The analyses resulting from the questionnaire show both similarities and differences in their understandings. The similarities are connected to the policy requirements. Where they differed, some were connected to the policy while others were disconnected, for example, Dinzi agreed that it enables assessment results to be communicated clearly, accurately, timeously and meaningfully as required by the policy but Hayley disagreed. I recognise that this research instrument on its own might possibly provide limited insight into their understandings therefore I will probe into each ones' interview to obtain the deeper insight necessary to respond adequately to the research question.

I now examine and compare Dinzi and Haley's responses to the free-writing schedules (A2 for Dinzi and B2 for Hayley) and interviews (A3 for Dinzi and B3 for Hayley) about each ones understanding about the policy.

With regard to the rationale underpinning the new assessment policy, Dinzi's understanding is as follows:

Through assessment the students' achievement on this road to success can be measured against the expected outcomes. It therefore sees to it that students are given equal opportunities to succeed by implementing different methods of assessment in order to accommodate all the levels of abilities of students.

(A1)

While Haley's understanding is as follows:

To vary methods used to assess learners (to give the bigger picture) not just theoretical. To give tools to assess the weaker learners, to credit learners at whatever rate that may have acquired the necessary competence. To encourage life-long learning

(B1)

The analysis suggests different understandings, but both Dinzi and Hayley know that they need to use different methods of assessment, and both invoke the rhetorical terms associated with the education policy agenda generally such as “students are given equal opportunities”, “all the levels of abilities”, “at whatever rate” and “lifelong learning”. But only Dinzi mentioned ‘outcomes’ which closely but partially resembles the rationale as provided by the policy, namely, “both the shortcomings of the current assessment policy, and the requirements of the new curriculum for grades R-9 and Adult Basic Education and Training, have made it necessary to develop a new assessment policy” (Department of Education, 1998: 8). I recognise that interpretations of texts will differ from person to person, depending on a variety of factors, but the issue for this study is how will this different, if not superficial understandings between the two teachers impact each ones assessment practice.

To Dinzi the goal of the assessment policy is:

To make it possible for the learner to meet same standards in the same grade though they may be in different schools. It then accommodates learners even if they need transfer from one school to another.

(A2)

While to Haley the goal is:

To give a better reflection on a learner's capabilities. To continuously assess a learner's progress. To maximise a learner's potential.

(B2)

While their responses seem different they cohere in the emphasis that each teacher places on the 'learner' but without mentioning the 'teacher'. Haley's reference to 'continuous' assessment share some resemblance with the policy that articulates that the goal of the policy is to "enhance the provision of education for each learner which is continuous, coherent and progressive, making it one of the key element in the quality assurance system. The policy introduces a shift from a system that is dominated by public examinations which are 'high stakes', and whose main function has always been to rank, grade, select and certificate learners, to a new system that informs and improves the curriculum and assessment practices of educators ..." (Department of Education, 1998: 9-10). From this analysis it is clear that both Dinzi and Haley have different understandings of the goal of the policy and understandings that seem only partially connected to that given in the policy. Why? How will this influence each ones assessment practice.

Dinzi's general understanding of the policy is as follows:

I am not conversant about the basics. I cannot really get deep into it. I don't have deep knowledge about it as such.

(A3)

I understood it as the new way that was introduced by the National Department of Education; what should be done, what are the procedures to be taken, what forms of assessment the people have used. What tools and techniques and what methods should they be used, and then how much involved should a student be in the assessment.

(A3).

But Haley's is as follows:

I do not understand everything in these documents. I have got all this information; I am not detailed so much in the sense of ideas.

(B1)

To continuously assess learners with the aid of various methods and not just with the use of tests and exams. Not to link learners to a percentage but assess them on “if a skill have been mastered or not”. Learners must get the opportunity to improve themselves. Teacher must guide learner to obtain level needed to master the skill in question.

(B2)

By their own admission both teachers concede that they do not have a deep understanding of the policy. Their understandings differ in that Dinzi knows that it is related to a “new way” generally and but she focuses more on the ‘what’ of the assessment, while Hayley on the other hand repeats ‘continuous assessment and different methods’ in most of her responses but in this specific case she adds that the new policy is moving away from examinations and tests and mentions skills that are to be mastered. However both understandings are partially connected to the assessment policy that states that the assessment practice must be compatible to OBE; focus on the achievement of clearly defined outcomes; assess continuously; use a variety of tools and methods to generate and collect evidence of achievement; evaluate evidence against outcomes; record findings; use findings to assist learners develop and improve teaching and learning and define what learners are to learn (Department of Education, 1998: 9-14).

According to Dinzi the purpose of assessment is:

[To] make the learners to be independent, accountable and responsible citizens

(A2)

For Hayley it is:

To give a reflection on a learner’s capability. To be able to assess if a learner has obtained/master a skill. To continuously assess a learner’s progress and maximise a learner’s potential.

(B2)

It is clear that their respective understandings differ from each other. Dinzi’s understanding is very general and unrelated to that given in the policy, while Haley’s partially resembles the policy that states the purpose of assessment is to determine whether learning required for the achievement of the specific outcomes is taking place; determine whether any difficulties are being encountered; report to parents,

other role players and stakeholders on the levels of achievement during learning process; build a profile of the learner's achievement across the curriculum; provide information for the evaluation and review of the learning programmes used in the classroom and maximise learners' access to the knowledge, skills, attitudes and values defined in the national curriculum policy (Department of Education, 1998: 9-10).

Dinzi's understanding of formative assessment is:

The assessment that happens during the learning process and gives information about learner's progress thus far.

(B2)

Haley's understanding is:

Assessment with the use of tests and exams (tests usually based on theory/written)

(B2)

They differ in their understandings of formative assessment as illustrated above. However Haley's understanding seems incorrect, while Dinzi's has some connections to the policy that indicates formative assessment ensures "the positive achievements of the learner may be recognised and discussed and the appropriate next steps may be planned" (Department of Education, 1998: 11).

Dinzi's understanding of critical outcomes is as follows:

I am not sure about it.

(A3)

While Haley's is:

It's that five main ones of all subjects, if I'm correct, and that's like you must be able to work in a group, you must be able, there's five big ones that overall, that's as far as I know. It's more a global view, certain things the government want each student at the end of the schooling career, the critical things they want a child to be able to do or the skills they might have obtained after twelve years in school.

(B3)

Dinzi admits that she has no understanding of critical outcomes, while Haley's response is partially linked to the policy meaning of critical outcomes, namely "the broad, generic, cross-curricular outcomes" (Department of Education, 1998: 19) and that "the specific outcomes grounded in the critical outcomes will serve as a basis for

assessment” (p.11). The questions invoked are: Why is Dinzi not sure about the meaning of critical outcomes, a fundamental concept driving not only the new assessment system but also the new system of education? How will this affect her assessment practice? How would Hayley’s partial understanding of the concept critical outcome influence her assessment practice?

Specific outcomes to Dinzi means:

What is expected of students to know at the end of each lesson... the assessment is guided by this specific outcomes.

(A3).

To Hayley specific outcomes mean:

The skills they must have obtained while, whatever you are doing is taking place. So that’s what they want us in Natural Science, the specific outcomes they want at the end of the phase.

(B3)

Their understandings differ in terms of each ones emphases, Dinzi refers to knowledge only without mentioning skills, attitudes and values, while Hayley refers to skills only without mentioning knowledge, attitudes and values. However they seem to have a general but partial understanding in terms of the policy that defines specific outcomes as that “what learners are capable of knowing and doing at the end of a learning experience. A learner’s skills, knowledge, attitudes or values may demonstrate the achievement of an outcome or a set of outcomes” (Department of Education, 1998: 21). The achievement of clearly defined outcomes makes it possible to credit learner achievement at every level, whatever pathway and whatever rate (ibid)

To Dinzi criterion-referenced approach to assessment means:

[A] certain criteria you set when you assess the students. But now the problem with it is that the criteria will differ from one educator to another because it depends now on what you expect from the students. Our criteria will never be the same.

(A3)

Hayley reported:

I don't know what this means. I can analyse the word and say what I think it means, but for the rest I have not heard about this before.

(B2)

Hayley admits that she does not know what it means. Why she does not know is crucial to explore further. Dinzi's explanation is not linked to that provided by the policy, which explains it thus: "The practice of assessing a student's performance against an agreed set of criteria. In the case of OBE the student is assessed against agreed criteria derived from the specific outcomes" (Department of Education: 1998: 19). The question is: How will this limited understanding affect their assessment practices?

Dinzi's understanding of assessment criteria is:

What do you use to assess the students? Are you going to use question and answers or are you going to the groups themselves to assess themselves. ... I'm not sure I'm using it correctly

(A3)

While Haley's understanding is:

The AC's are the ones elaborating on the SOs. That's what they want at the end of the day, to be able to assess underneath each of the nine SOs we've got in Natural Science. Each specific outcome has mos its assessment criteria, how you going to assess that specific outcome.

(B3)

It seems clear that the two teachers have different conceptual understandings of 'assessment criteria'. While Dinzi associates assessment criteria with methods of assessment, Hayley has an idea that the specific outcomes and assessment criteria are somewhat related in terms of its physical location in the curriculum policy. But both explanations are not connected to that given by the policy, that is, "evidence that the student has achieved the specific outcomes. The criteria indicate in broad terms, the observable processes and products of learning which serve as evidence of the students' achievement" (Department of Education, 1998: 19). The specific outcomes and their assessment criteria must be made available to students to inform them what is to be assessed, and that students who do not meet the criteria must receive clear

explanations with clear explanations with indications of areas that need further work and must be assisted to reach the required criteria (ibid).

Continuous assessment for Dinzi is:

When students are assessed almost daily and this counts towards their CASS.

(A2).

For Hayley it is:

To continuously assess learners on various types of activities with the use of different methods. To continuously track a learner's progress, so as to identify problems early, with enough time for corrective measures. I say the whole year and their marks are not just based on one exam at the end of the year. You get a picture of how strong the child actually is.

(B2).

It can be seen that Dinzi has a limited understanding of continuous assessment compared to Hayley whose understanding closely resembles that stated in the policy, that is: "An ongoing process that measures a learner's achievement during the course of a grade or level, providing information that is used to support a learner's development and enable improvements to be made in the learning and teaching process" (Department of Education, 1998: 19). It is the "best model to assess outcomes of learning throughout the system" (p9).

Dinzi's understanding of the relationship of the new assessment policy with the national curriculum is:

Not very sure and not conversant with the new national curriculum.

(A3)

Haley's understanding is:

I am not sure what the national curriculum framework means.

(B3)

Both Dinzi and Hayley admit that they do not know what the national curriculum is, and therefore by implication they would lack an understanding of its relationship to the new assessment policy. This relationship is clearly articulated in the assessment

policy: This new assessment policy for the General Education and Training Band, alongside the new national curriculum framework, provides the pedagogic basis for out new education and training system (Department of Education, 1998: 8). This finding invokes the questions: Why do they lack this understanding? How will this lack of understanding influence their assessment practice?

The cross-case analysis suggests first that Dinzi's understandings of the policy in most instances differ from Haley's understandings of the policy; and second that each one has her own understanding that in most cases is dissimilar to that of the policy. Based on this analysis I shall argue that both have surface understandings of the policy. Why this is the case and how this would influence their assessment practice are crucial questions to address for the policy implementation process.

A Comparison of their **Beliefs** of the Policy

Dinzi believes that the policy:

(A2) *[Encouraged] educators to work with the learners.*

And Hayley believes that the policy helped her:

(B2) *[Try] to find different ways in assessing learners. Plan activities in such a way to be able to assess it differently.*

The analysis suggests that both Dinzi and Hayley demonstrate positive feelings towards the policy.

While Dinzi believes that the policy:

(A2) *[Is] more learner-oriented. Learners are actively involved when you assess them.*

Hayley believes that the policy helped her:

(B2) *Give a better reflection on a learner's capability and to maximise a learner's potential.*

The analysis again shows that both Dinzi and Hayley demonstrate positive feelings towards the policy.

While Dinzi believes:

[There] is not much demand except that what we have been doing in the past has been given new names now.

(A2)

Hayley believes:

[Definitely] a lot of new demands, for example, take a lot of extra time (some pupils return assignments up to 5 times after they have improved it, to be assessed again; planning, large amounts of forms to fill in (administration), A tremendous amount of planning, Setting activities in such a manner that it can be assessed in different ways, A lot of stress because instructions change, really don't know if I am on the right track or not. At this point I feel a bit lost. Documents too general and confusing (too many different ones, do not know which one to use)

(B2)

The analysis differs from the previous ones, in that it suggests that while Dinzi is more positive towards the policy, Hayley seems less positive or maybe negative towards the policy.

Dinzi believes that parents should be involved in the assessment process (A2) but Hayley believes that parents should not be involved in the assessment process (B2). The analysis suggests again that Dinzi is more positive towards the policy while Hayley seems less positive towards the policy.

Dinzi believes:

The standards have been elevated because you associate assignments with universities; you never thought you can give a Grade 9 child to do a project, to go do an assignment. We'd just give them home work; there was no emphasis to doing these projects and assignments.

(A3)

But Hayley believes:

A university still needs to know what the child is capable of and I don't know how this assessment is going to help a university to know if someone can go there.

(B3)

The analysis shows again that Dinzi is more positive towards the policy while Hayley seems less positive towards the policy.

While Dinzi believes:

We need to be positive; with time say in 2 years time if there are no changes again we will make it

(A3)

Hayley believes:

The assessment for me is a nightmare.

(B3)

The analysis shows again that Dinzi is more positive towards the policy while Hayley seems less positive or maybe negative towards the policy.

According to Dinzi:

The learners benefit because they know in detail the different topics the educator dealt with in class (viz. the specific outcomes)

(A2)

But for Hayley:

Only weak learners (theoretically) benefits from this way of assessment. Learner who is very clever gets frustrated sometimes. Parents are affected in the way that learners need resources from different places, needs to get there and back (for example, brochures, library, interviews, etc.) – time consuming for everyone.

(B2)

The analysis shows again that Dinzi is more positive towards the policy while Hayley seems partially but less positive towards the policy.

Dinzi believes

In a way I can use the policy in class with small factors being considered like the size of the room.

(A2)

But to Hayley:

Some methods from the policy I can use but some of the methods are totally ridiculous.

(B2)

The analysis shows again Dinzi's more positive disposition towards the policy compared to Hayley who seems partially but less positively disposed towards the policy.

Dinzi does not feel empowered and confident to implement the policy (A3) while Hayley believes that the policy assists those students who can work creatively with their hands rather than 'theoretically' (B3). In this instance the analysis shows a reversal from the previous analyses in that Dinzi demonstrates a less positive view towards the policy while Hayley has a positive view towards the policy.

Dinzi believes that she is:

[Not] very conversant and don't have a deep knowledge about the policy.

(A3)

And Hayley believes she:

[Does] not understand everything in these documents. I have got all this information; I am not detailed so much in the sense of ideas. It is confusing.

(B3)

The analysis now suggests that both Dinzi and Hayley seem less positive towards the policy.

According to Dinzi, she believes that she did not receive adequate training to implement the assessment policy (A2). Hayley believes likewise, that she did not receive adequate training to implement the assessment policy (B2). It seems clear that both show less positive dispositions towards the policy.

Dinzi believes that that it is difficult to assess projects and assignments because:

Learners don't go the extra mile to and find the information and they don't do their work.

(A3)

And Hayley believes that it is:

[Difficult] to assess oral work and attitudes and values.

(B3)

Both seem to show less positive views towards the policy.

The cross-case analysis suggests first that Dinzi's beliefs about the policy in most instances differ from Haley's beliefs about the policy; second that Dinzi seem to possess more positive beliefs about the policy than Hayley; third that Dinzi has more positive beliefs about the policy than less positive or maybe negative beliefs; and fourth that Hayley seems to have more, less positive/negative beliefs about the policy than positive ones. Based on this analysis I shall argue that both have positive and less positive/negative beliefs about the policy. This invokes the questions: Why do they have less positive/negative beliefs about the policy? Will this less positive/negative belief affect their assessment practice?

The analysis from this section suggests that both teachers have different understandings from each other, and in most cases partially connected or surface understandings as I call it, and in some cases disconnected to the new assessment policy, and their beliefs with regard to the policy is both positive and negative. How these varied and fluid understandings and beliefs shape their assessment practice in the classroom is the focus of the next section.

A Comparison of the Classroom Practices of Dinzi and Hayley

In this section I compare the classroom practices of Dinzi and Hayley, in response to the second research question, namely: **In the context of official policy, how do teachers practice assessment in their classrooms?** I shall draw upon the following data sources of each teacher to construct the cross-case report:

- Questionnaires (A1 for Dinzi and B1 for Hayley)
- Interviews (A3 for Dinzi and B3 for Hayley)
- Classroom observations (A4 for Dinzi and B4 for Hayley)
- Teacher documents (A5 for Dinzi and B5 for Hayley)
- Teacher records (A6 for Dinzi and B6 for Hayley)

- Student notebooks (A7 for Dinzi and B7 for Hayley)
- Other student records (A8 for Dinzi and B8 for Hayley)
- Examination question papers (A9 for Dinzi and B9 for Hayley)

A comparison of their reported practice

I first compare their reported claims made in the questionnaires (A1 and B1).

Both Dinzi and Hayley claimed that their assessment practice mirrored the policy requirement in terms of: assessment offers all learners an opportunity to show what they know, understand and can do; assessment helps learners understand what they can do and where they need to develop further; assessment is continuous; assessment decisions are based on pragmatic, trial-and-error grounds; facts, applications and higher order thinking skills are assessed; assessments are not restricted to tests only; learners are involved in assessing their own work; strategies are in place which reveals when pupils have difficulties or are not making progress; portfolios are built over a period of time; marking focuses on the learning intentions as the criteria for success; marking strategies help the learners understand what they have achieved and what they need to do next; the outcomes of marking, along with other information, are used to adjust future teaching plans; assessment achievement data communicated to learners clearly, accurately, timeously and meaningfully; reporting of results is both informal, namely dialogues in class and formal, namely written reports; assessment of learners' learning is reported to parents/guardians in a way which identifies achievements and what the learner needs to improve; the outcomes of assessment of learning activities provide feedback and feed forward for learners; assessment of learning information is used to evaluate teaching and for monitoring progress; progress against key learning outcomes is observed, noted and recorded and reports indicate areas that need to be developed. Dinzi makes more claims that her practice mirrors the policy than Hayley does.

Both claimed that there was room for improvement with regard to the policy in terms of: the key learning outcomes have been identified so that assessments made against these can be used to help develop learning; achievement data linked to curriculum outcomes; assessment decisions are based on thinking through the purpose and

principles of assessment; portfolios are consistently used to confirm assessment judgements; parents are involved in recording comments on their children's work and records enable reports to be written easily.

However they differed markedly in their claims of whether their assessment practice did not mirror the policy or required re-thinking. Dinzi claimed that none of her assessment practices deviated from the policy or required re-thinking while Hayley claimed that many of her assessment practices did not mirror the policy or required re-thinking such as: assessment practices are sensitive to gender; assessment practices are sensitive to abilities of learners; assessment allow learning to be matched to the needs of the learners; learners are involved in recording comments on their work and reports outline strengths in all aspects of school life.

They also differed in terms of whether their respective practices mirrored the policy or there was room for improvement, for example, while Dinzi claimed that her assessment practice mirrored the policy in terms of: informs and improves the curriculum and assessment practices; learners are provided with opportunities to reflect and talk about their learning and achievement; uses a wide range of assessment methods confidently and appropriately; assessment information is used to decide what to do next with individuals, groups or the class; the marking process includes both verbal and written feedback; progress against key learning outcomes feed forward into future planning and timing of reports allow appropriate discussion and action to take place, Hayley claimed that there was room for improvement in these aspects of the policy. Also while Hayley claimed that her assessment practice mirrored the policy, for example: sharing of assessment intentions with learners is routine practice, which enables learners to understand their role in assessment process; a holistic and best-fit approach is used; assessment informs daily and weekly planning; prompt and regular marking occurs, and use a range of recording strategies for additional records, Dinzi claimed there was room for improvement.

Both reported that they use the following methods, approaches and techniques to assess learners: tests that alone set, tests set by subject teachers, standardised external tests, peer assessment, examinations, portfolios, project work, assignments, and

observation sheets. Both also reported that they do not use conferencing and journals to assess their learners.

While Dinzi claimed that she uses all the methods except conferencing and journals, Hayley indicated that she does not use informal monitoring by observation, oral questions and answers, interviews, learner self-assessment, and self-reporting, which Dinzi claims to use.

Both claimed that they did not have the necessary knowledge and skills, and the necessary resources such as time, materials and capacity to implement the assessment policy. Both also claimed that the school organisation is not conducive to the implementation of the policy, but Hayley indicated that her school was trying.

Dinzi claimed that she changed her assessment practice by:

Giving more types of assessment to learners and doing more group work.

(A3)

While Hayley claimed that she changed:

Construct learning activities in such a manner that I can assess in a variety of ways and not just by using worksheets and tests Developed new forms to try and record assessment in an appropriate manner. Develop assignments/projects in such a way to be able to assess each AC of each SO (this is very difficult for me).

(B1)

The claims and reports made above illustrate that both Dinzi and Hayley use a variety of methods to assess students as required by the policy. However Hayley added that the new way of recording and designing assessments and projects were difficult.

The analysis of their claims reveals some convergence and some divergence from one another and from the assessment policy. The question is: Why the divergence and how will the divergence impacts on their assessment practice? I follow up these claims in the next section by examining their reported responses to the interviews (A3

and B3) for deeper insights to enable me to construct a more meaningful and robust comparisons of their assessment practices.

Both Dinzi and Hayley reported that they used a variety of assessment methods such as tests, peer assessment, group assessment, portfolios, projects, class work and assignments to assess their students continuously. These methods are consistent with the policy requirements. However only Dinzi reported that she also uses ‘oral assessment’ and ‘interviews’, while only Hayley reported that she uses ‘observation sheets’ to assess. Neither reported the use of ‘conferencing’ and ‘journals’ as required by the policy.

Both reported that they had changed their practice as illustrated by their responses.

Dinzi reported:

Well I would say I have changed because I am able to assess the students randomly at any time. For example, I can assess them maybe weekly or maybe daily. It's unlike in the old time where we had to assess only by giving the children tests, ...there is a mountain of tests. Now by even giving them class work, there are some class work whereby you feel you assess this one, allocate marks to that class work or homework.

(A3)

Hayley reported:

[To] assess in different ways and not just test and exams, to continuously assess a child and not just once or twice a year. I assess them formally in the form of tests and worksheets that I mark. I also assess them informally in my head the whole time that I'm working with them. With a worksheet I will have a memo, and like when they do group work I will have a form on which I indicate if they're co-operative in the group, are they participating; are they fulfilling their role that they have in the group. I will give them a worksheet or a little test or the paper that they must comment on and they need to fill it in, it's usually by writing. For me it's difficult to orally assess people because that's just logistically a big problem. But I think these other assessments like debates, the child's attitudes and values and things, for me it is very difficult

(B3)

The analyses of their reported practice suggest firstly that their assessment practices are similar in many ways to one another in that both claim to use a variety of

assessment methods, and not only tests in their classroom. This is in accordance to the policy. Secondly they also differ from one another in that Dinzi seems to be using more methods than Hayley. Third there are disconnections to the policy in terms of not using some methods such as conferencing and interviews.

As I had indicated in the earlier chapters, what is claimed and reported may not necessarily be reflected in actual practice. This is not because the claims and reports made are dishonest; on the contrary, responses are often shaped by perceptions. People often perceive that they are doing something in a certain way but a close analytical exploration may reveal something different. Furthermore Dinzi and Hayley may not have been able to adequately explicate their assessment practices during the reports. These may be revealed in realm of their actual classroom actions. Therefore I examine their real classroom actions to compare them to one another so that I may obtain a deeper insight into their assessment practice.

A comparison of their **observed assessment practices** in the classroom

I draw upon the classroom observation data to construct this comparison, (A4 for Dinzi and B4 for Hayley). I first compare the first lesson observed in each teacher's classroom before making further comparisons. I observed this first particular lesson in Dinzi's classroom on 24 July 2002 (A4, 24 July 2002) and in Hayley's classroom on 23 July 2002 (B4, 23 July 2002). Both lessons were single lessons.

First observed lesson

Hayley's students were lined up quietly outside the laboratory awaiting her invitation into the classroom. They entered in a disciplined manner, took their individual places, placed their bags on the floor, and stood waiting for Hayley to greet them. Hayley waited until everyone was standing in absolute silence before she greeted them. She then requested them to sit down which they obediently did. There were thirty-three students present, the full class enrolment.

Hayley began the lesson by informing the students of her observation that not all of them had completed their previous work. She requested that those whose books she

did not mark were to leave it on the front desk for marking. She wrote the date on the board before reminding the students about the last term's activity on specific outcome 2 done in the library. She reviewed the previous work briefly using the question and answer method illustrated below:

Teacher: *Before we can go on, there's just two things we must recap. We were busy now with energy ne. Now there are different states of energy. Yes?*

Student A: *Potential energy.*

Teacher: *And the other one?*

Student B: *Kinetic energy.*

Teacher: *Kinetic energy. Very good! Now we have different forms of energy. Let's see?*

Student C: *Electrical energy*

Teacher: *Electrical energy, and?*

This review continued to the end in this manner, after which she began the day's lesson by informing the students:

Teacher: *Some of you have not been something yet, some of you have.*

She assigned roles to different students in their groups such as 'Leader', 'Scribe', 'Timekeeper', and 'Reporter' as indicated on the handout with the heading "Group Work: Peer Assessment" that provided the job descriptions of the different group members (that is 'Leader', 'Scribe', 'Timekeeper', 'Reporter') followed by a rubric with two columns, one column was for "assessment" and the other "participation". Each column had numbers 1, 2, 3, and 4 as criteria, 1 indicated poor, 2 below average, 3 above average and 4 very good. She provided each student with a worksheet containing a picture that she said showed "*lots of people doing different things*". She told them that each group would be given ten minutes to complete the questions. She reminded the 'timekeepers' of their roles, and if they did not have watches she would assist them. She requested each one to write the answers on their worksheet after their discussions, and not only the 'scribe'. The worksheet seemingly was a photocopy from a textbook. On the worksheet was the heading in bold "Energy and

change” and below that in bold “Find the energy source NS³ SO1⁴:AC1⁵; SO9⁶:AC1⁷; LLC⁸ SO2⁹:AC6¹⁰; HSS¹¹ SO4:AC1” (Note: what these abbreviations represented or meant were not given on the worksheet), and below this was the instruction: “Study the picture with a partner”. On the count of five she asked them to begin, reminding them that they had ten minutes to complete their work. As students were working, she walked around observing and helping them. All groups worked in a disciplined fashion and displayed interest and focus in their work.

I focused on one particular group and observed that they seemed to be experiencing problems interpreting the word ‘places’ in the first question: “Make a list of all the places in the picture where energy is being used”. They seemed to have problems relating the word ‘places’ with the word ‘items’ in the second question: “All the items on your list get their energy from different sources”. They were arguing about the correct name for the coal fireplace/heater. One said it was a “bowlah”, the others laughed at this answer. They settled for “coal heater”. They could not find the picture of the candle to match it with ‘wax’ given on the worksheet and were arguing about it. They also had difficulty in answering the last question: “Where does the energy in the source come from? Where does it go to?” One student consulted the textbook for help. The one student instructed:

Student A: *Just think where diesel and paraffin get their energy from?*

Since they could not answer the question they called the teacher for help. The teacher asked them where petrol came from and one student answered, “Coal”. This group did no writing but concentrated on discussions:

Student A: *Now what’s this?*

Student B: *Paraffin*

Student C: *Primus stove*

³ Natural Science

⁴ Specific outcome 1: Use process skills to investigate phenomena related to the Natural Sciences (Department of Education, 1997: 9)

⁵ Assessment Criteria 1: Phenomena are identified (ibid)

⁶ Specific outcome 9: Demonstrate an understanding of the interaction between the Natural Sciences and socio-economic development (23)

⁷ Assessment Criteria 1: Evidence is provided of how science and technology are used in society (ibid)

⁸ Language Literacy and Communication

⁹ Specific outcome 2: Demonstrate an understanding of concepts and principles, and acquired knowledge in the Natural Sciences (6)

¹⁰ Assessment Criteria 6:

¹¹ Human and Social Sciences

Student A: *Ja, we can just say paraffin stove*

Student D: *Where's paraffin stove?*

The teacher alerted the class that they had five minutes, and had to hurry up and complete their work. This resulted in students' becoming a bit noisy as they rushed to complete their work. Hayley continued to observe and help students when the buzzer rang signalling the end of the lesson. Hayley clapped her hands as a strategy to get students to be quiet and pay attention to her. She requested students to put their worksheets back in their books except those students whose books were not marked, and they left their books on the front desk as they left the classroom. Some students cleaned the laboratory before they left.

At the end of the lesson Hayley informed me that the purpose of that lesson was "to ensure students can work in groups, assess one another and to assess their abilities in groups (personal communication: 23 July 2002). She added that she did not record peer assessment exercises because the students were not as yet experienced, and that some students would not be as honest in assessing their friends as she would have liked them to be (ibid).

In Dinzi's case, Dinzi and I walked into a very noisy, dusty and dirty classroom. Students were constantly walking into and out of this classroom. Many students were outside this classroom adding to the noise. The dusty desks were haphazardly arranged, some were in rows, others joined for group work. Amidst all this noise, and seeming chaos, some students were standing up to greet us, others were seated, and others were moving into and out of the classroom. After greeting the students she requested one student to distribute the worksheet to the students. The worksheet seemed to be a photocopy of a page from a textbook. At the top of the worksheet was a heading: "Programme Organiser: Matter and Materials", below which appeared "Sub-programme Organiser: Properties and Uses of Materials", and below this appeared: "Unit 13: Material Literacy". Dinzi asked questions (I found it difficult to hear the questions clearly because of the noise, and the audio-tape could not be transcribed because of the noise from the class and outside the class) to elicit responses from the student, many of who seemed to be inattentive to the lesson. Many were talking with one another; some were looking out the window. Two were sucking

lollipops, another three were eating potato crisps, and three were chewing gum openly in the classroom. Dinzi seemed to be competing with the noise from both inside the classroom and outside the classroom. The noise made it almost impossible to hear Dinzi until she shouted: “Shut up!” After ten minutes, a student casually walked into the classroom and seated himself. I counted thirty-eight students present in the class from an official enrolment of fifty. Dinzi requested students to refer to the worksheet that they had just received. She read the four questions aloud to the noisy class and requested that they work in pairs. They did not work in pairs but in groups of varying size depending on their choice and used this time as an opportunity to continue making noise. The observed group of six students seemed to be having difficulty in understanding what had been expected of them. They were concentrating on the box containing the objectives of the lesson, namely: “In this unit you should be able to: revise the concepts mass and volume. Investigate the phenomenon density.” They were trying to read it aloud but were struggling with what seemed to be a language problem. Only four students had their notebooks in class. Dinzi walked around the classroom but seemed not to focus on whether students were answering the questions or not. When she returned to the front of the classroom, she read the second question aloud:

Teacher: *What is volume and in what unit is it measured?*

She also provided the answer orally. She had repeated the third question in a similar manner and provided the answer orally. Most of the students were not writing. They appeared to be confused but Dinzi continued in the same mode, which is reading the question and providing the answer orally. She did not write anything on the board. When the buzzer rang signalling the end of the period, Dinzi requested students to paste their worksheet in their notebooks as their homework exercise.

Both teachers used worksheets and group work as pedagogical practices in their classrooms. Haley’s classroom was characterised by strict discipline while Dinzi’s classroom was not. The question is: Why and how would this affect the assessment practice of each teacher? It seems that only Hayley used the information from the previous assessment to guide teaching and learning, and she also mentioned specific outcomes, also specific outcomes, although in abbreviated form, appeared on the worksheet. Dinzi on the other hand, did not review previous work and did not mention outcomes at all, but rather used ‘objectives’ rather than outcomes to guide the lesson.

This raises the question: Why is Dinzi using ‘objectives’ and not outcomes to shape her lessons, and how will this influence her assessment practice? Furthermore only Hayley allowed the students to complete their work before reviewing the answers the following day, while Dinzi provided the answers to the questions after ten minutes without allowing the students to complete the assigned work in class. Why? Dinzi used questions on the worksheets that required simple factual answers from students while Hayley used questions on the worksheet that required students to apply their knowledge. This again begs the question: Why? In both classes the groups of students that I had observed had been experiencing language problems. Would this affect the assessment practices of the teachers? Both Hayley and Dinzi did not make the purpose of the assessment explicitly clear to the students. Neither Hayley nor Dinzi assessed this work of students formally, but perhaps may have informally assessed them through observations. No peer assessment took place despite the fact the Hayley had written, “peer assessment” on the worksheet and Dinzi had requested students to “work in pairs”. This analysis shows first that similarities and differences exist in both their assessment practices as shown above, and second that their assessment practice seems to be weakly connected to their stated claims and to the assessment policy as far as peer assessment is concerned. This raises the question: Why?

Lesson on practical work

I now compare each teachers’ lesson where practical work was conducted; in Haley’s case (B4, 25 July 2002) and in Dinzi’s case (A4, 7 August 2002).

As usual Hayley started the lesson with a review of the previous work employing the question and answer method before she provided the students with a worksheet informing them that they were going to do practical work with the given apparatus, namely, a torch, a lamp, a heater, a candle, an alarm clock, a kettle, a fan and a hairdryer (teacher brought these from her home), each distributed on different benches. She requested them to “be as precise as possible” and to tell her “*the form of energy that is in it*”. She continued:

Teacher: *You let the apparatus stand as it is, then you put it on, then you see what you see and what you feel and all of it. Then you switch it off. ...and then underneath on that line you must tell me what type of energy is in the source before I switch it on. Then when I switch it on, what is going, that energy going to turn into. Ok, so you will have a word with its arrow then some kind of energy there is afterwards, ok?*

They rushed excitedly to do the practical work in their groups. Hayley went around observing and assisting. Some groups that I observed were working well, for example, one switched the torch on, discussed that chemical energy was changed to heat and light energy, and wrote it down, using arrows correctly. Another group using the alarm clock seemed confused. One student was discussing while one was writing without using arrows as illustrated below:

“Chemical, electrical, sound”

Some observed groups were discussing in an African language, others in Afrikaans, very few in English. Some were fooling around, for example the one group with the hairdryer and another group with the torch. Hayley seemed to be experiencing problems maintaining discipline and helping students simultaneously. Students were talking very loudly, and seemed to be experiencing problems when she intervened:

Teacher: *It is very confusing if you have the, the states of energy and the forms of energy mixed up. Ok, now this exercise, when you read there at the top tells you, you must tell me the different forms of energy. Ok, so now you cannot tell me it is potential, radiant, kinetic, that is what takes place. But you must be specific. You must tell me what form of energy, which changed into which other form ok. Technically, it is a long story, for the moment we will call it mechanical energy, ok.*

(Emphasis in original)

The students continued working and when they had completed their work Hayley requested students to switch the apparatus off and take their original individual seats.

She continued:

Teacher: *I need you take a pencil in your hand. Ok, now I firstly thought that we would mark one group the others and so forth but then you cannot actually understand what you wrote yourself so I want you to mark your own work.*

She used the question and answer method to review the activities orally as follows:

Teacher: *Ok, next one, the candle, yes?*

Student X: *Wax*

Teacher: *The wax is a form of chemical energy, Ok, next?*

Student Y: *Light energy*

Teacher: *Daars sy. The chemical energy will have an arrow, after the arrow we say light energy and?*

This pattern continued until the end of the lesson and end of the day. However not all students were assessing/correcting their work. Hayley requested that they paste their worksheet in their books and that she would check it on the following Monday (note this was Thursday, and there was no Science on Fridays). She informed them that they would need their books to study for “*a little test for 15 marks next week Thursday*” which she added would be based on forms of energy covered in the previous three pages of work that they did. Hayley dismissed the class.

In Dinzi’s case this was the only time during the seventeen observed lessons that the lesson was conducted in the laboratory. While students were running around in the science laboratory, she handed out worksheets and told them in the midst of the noise that “*we are going to find out about the topic density*”. While the worksheet had the words ‘specific outcomes’ on it, no specific outcomes were written, but the space was left blank. She requested that they form four groups, about ten per group with a maximum of twelve per group. When she said “*one member from each group come to the front for some apparatus*”, a whole group of students ran noisily to the front table. It became extremely noisy with students not only screaming loudly across the classroom but also dragging the laboratory stools. It made it extremely difficult to hear Dinzi’s voice which was drowned by the students’ noise. The audiotape was impossible to transcribe because of the noise in the class. Dinzi wrote on the board ‘pipette’ and showed them what it was. One student walked out of the laboratory without excusing himself – Dinzi either did not notice or did not mind. The students were moving from group to group just to chat to others. Discipline had totally collapsed when the teacher screamed: “*Quiet in your group. Shut up!*” She read the procedure aloud to them and asked one member per group to “*fill the plastic basin with water*”. They did but not without throwing water onto their friends, and messing the floor and the tables. Dinzi requested that they complete the table in their

worksheet after they placed the objects into the water. She had to scream to get their attention. She told them what to do and re-drew the table on the board.

The group that I observed did not know the difference between a rubber stopper and a cork stopper as this was the first time that they saw them and their first visit to the science laboratory. The teacher told them to place a tick in the relevant column. The observed group threw all the objects into the water simultaneously without writing what they observed. One student from another group asked the teacher: “What is ‘sinks’ and what is ‘floats’?” The teacher explained the concepts very briefly. The observed group placed the cork stopper into the water, and filled in the table “cork sinks” (when it floated) in the column ‘floats’. The teacher tried to use one group to demonstrate to the class but was not successful because students were not paying attention but were playing with the water and apparatus. The observed group did not know what to do thereafter and were just playing with the water and apparatus, similar to the rest of the class until the lesson ended.

The analysis of this lesson reveals once again that both Hayley and Dinzi used worksheets and group work as preferred pedagogical styles, and invested much time and effort in preparing for the lessons. Discipline in Hayley’s class is very different to Dinzi’s class, as I have previously indicated. But in both lessons neither the outcomes nor the purpose of the assessment were made clear to the students as requested by the policy. Furthermore Hayley and Dinzi did not formally assess the students’ work themselves. But in Hayley’s case, at least, she requested students to assess their work themselves in pencil, which could be regarded as a form of self-assessment, from the oral review of the work, although this was not formal in the sense that there were no marks given and no recording of students’ performance. In Dinzi’s case there was no evidence of any review of the work or assessment of the work by her or by the students.

Individual student work

During the observed classroom lessons I had observed only Hayley conduct ‘individual’ work in class where students were required to respond to a set of prepared

questions set by the teacher and assessed by Hayley, recorded and used as indicated by her:

Teacher: *This worksheet you must do individually, remember as soon as I mark something for marks, I need you to do it yourself because otherwise I can't see if the person next to you can do it. I want to see if you understand it, as soon as you don't understand it, then you must put your hand up, because I am the only one that can help you with this. Is that clear?*

(Emphasis in original)

I have analysed this lesson in detail in Chapter Six. My purpose of repeating it here is to show that I did not observe this kind of assessment practice in Dinzi's classroom.

The question is: Why?

Assignment/Portfolio

Similarly I had observed only Hayley conducting an 'assignment/portfolio' in her classroom. This 'assignment/portfolio' requested students to respond individually to a set of prepared questions by the teacher in the form of a booklet. Students had to use their textbook and complete the work in class time. This was formally assessed by the teacher and recorded and used, as reflected by her:

Teacher: *This week we are going to do an assignment so that I can give you marks, so that I can assess you on this work. When I assess you, you must please remember to use your textbook. Now how we are going to do this; this assignment is totally individual, so you must not ask anyone around you. What is happening, there is a paper booklet like this again; I am going to give you. Then the instructions: I will go with all of you through the instructions, and then I am going to ask that you only sit on your own. Just make sure that you have enough space; I know that it is you and that you are doing it yourself.*

(B4, 19 August 2002; emphases added)

I have analysed this lesson in detail in Chapter 6 and will not repeat the analysis save to state that I did not observe this form of assessment in Dinzi's classrooms. Again it begs the question: Why?

Project work

I observed project work as a form of assessment in Hayley's class only. This project based on specific outcome 6, had been given to students at the end of the third term. It was in the form of a booklet designed and prepared by Hayley. Students were required to complete it in their holidays. I have provided a detailed description and analysis of this project in Chapter Six; therefore I shall not repeat it here. The purpose of mentioning it here is to say that I did not observe this in Dinzi's classroom? Again the question is: Why?

Tests

As far as tests are concerned, I had observed Hayley administer two tests, one 'small' and one 'standardised' in her class, while Dinzi administered only one, a 'standardised' test. The question is: Why? Hayley handed out the prepared 'standardised test' question papers to the thirty-three students who were absolutely quiet and seated two to three per bench, as in examination conditions. She had informed the students previously about the test. She requested that they hold up their pens with their left hand until she requested them to start writing. She informed them that they had half an hour to complete the questions, before instructing: "*On your marks, get set and go!*" On the question paper appeared the name of the school, the grade, the module, the unit and heading "TEST". It had four questions with a total of 30 marks. It also indicated the criteria that were going to be used for marking the bar graph (this was done in a previous assignment) and a rubric for the assessment of the bar graph with "SO2" written next to the rubric. Each of the four questions were different, for example, question one was based on a diagram provided, question two was a calculation, question three had questions based on information provided in a table and question four on the construction of a graph. Most of the questions focused on recall of facts although there were few for about five marks out of thirty that required application of knowledge. Hayley walked around the room invigilating.

Dinzi stood at the entrance of the classroom and had handed out the question papers to the students as they walked in. The desks and chairs were arranged in groups and students sat in groups on any seat. Two students reported that they did not have pens.

I gave the one student a pen and Dinzi gave one to the other student. There were 42 students in the class joined at five-minute intervals by another two. Dinzi was marking the register as she walked around the classroom. She called out the names aloud and students had to reply, “present” or “absent”. I observed that students were looking into each other’s work because the group seating arrangements encouraged this practice, as well as Dinzi’s attention on marking the register. When Dinzi observed students copying she requested that they separate their desks. Dinzi interrupted the students to inform them that there was an error in question one:

Teacher: *Question one has a mistake. Volume must be in cubic centimetres. The column is volume.*

She wrote on the board: “20 cm³”

(Note that the question paper had “20 cm”)

She continued to mark the register. A student enquired about question two, and Dinzi read the question aloud and said:

Teacher: *You must know how to answer the question. Why are you copying the table? Don’t copy the table. You just answer the question. Why I give you question paper if you are going to re-write question paper? One group did not hand in their work yesterday. I must get it after the test.*

The Teacher began writing a letter to the police. I observed students copying. One student, who I had observed to be a clever one in the class, asked the teacher what was required in question three.

Teacher: *Answer number 4 in question 3*

(This seemed very confusing because the same question was repeated in a different way; it seemed as if ‘a cut and paste’ method was adopted by Dinzi). Towards the end of the lesson when she enquired how many had completed the test only five hands were raised. She requested a student to collect the answer sheets while she was continuing writing the letter to the police. Students were leaving the class before the end of the period. When the buzzer rang signalling the end of the lesson seventeen students were still writing the test. The other class (Grade 9A Maths) entered the classroom for their lesson while the 17 Grade 8B students were still writing the test and Dinzi continued writing the letter. Dinzi asked the Grade 9 students whether she had given them an assignment, and they responded “yes”. She continued with her

letter while some Grade 8B students were copying while writing the test, and the Grade 9 students were making a noise while waiting for the teacher to start the lesson. Dinzi then noticed that some Grade 8B students had still been writing the test and requested that they stop before collecting their answer papers. The question paper consisted of three questions with a total of twenty-five marks. One question was a calculation, one was based on information from a table provided and the other was labelling a given diagram. All three questions tested recall of information since all had been done previously in the class.

The comparative analysis reveals the following: In Hayley's class the students write under examination conditions while in Dinzi's class it is not, in fact it is under normal classroom conditions. The question is: Why does this difference exist, and what is its impact on their assessment practice? In Hayley's class the question paper had no errors and was not confusing but Dinzi's question paper had errors that caused confusion. Again this begs the question: Why? Hayley tested application of knowledge while Dinzi did not. Why? Hayley provided her students with a rubric and criteria for assessment while Dinzi did not. Why? However both Dinzi and Hayley did not: make the purpose of the assessment clear, did not use the specific outcomes as the basis for assessment, did not provide the students with the specific outcomes and their assessment criteria to inform them what were to be assessed, and did not use the criterion-referenced approach to assessment as required by the policy. This invokes the question: Why?

General comparison of the modal patterns of the observed lessons

I shall compare the modal patterns of the observed lessons, seventeen in the case of Dinzi (A4) and twenty in the case of Hayley (B4).

Most of the lessons of both Hayley and Dinzi were characterised by a 'teacher-centred' approach, with the teacher standing in front of the class, engaging in whole class instruction or using a didactic form of the 'questions and answer' approach; although in Dinzi's case she also provided the answer most times, with limited student input as illustrated below:

Teacher: *We want to calculate density, where do we start? Quickly, quickly. Density is mass over volume.*

After writing the formula for volume on the board and calculating the volume, she asked:

Teacher: *What do we do with the volume?*

She worked out the problem on the board and informed them what kilogram per meter cubed meant, and said:

Teacher: *If other units given, for example, given density and volume and asked to find mass, how do you do it?*

She wrote the formula for density on the board, and used a mathematics example to 'tell' further by also writing on the board:

Teacher: *Density is mass over volume*

(A4, 1 August 2002)

In Haley's class, the question and answer method did invite some student participation as shown below:

Teacher: *What kind of energy does a burning candle use?*

Student A: *Kinetic energy*

Teacher: *Now I want to teach you something. Next to number 1, it counts for 2 marks. This usually means that you need to name 2 things, ok, so if you only say radiant energy I can only give you 1 mark, but what do we know? Radiant energy is made up 2 types of energy? Yes?*

Student B: *Heat energy and light energy*

Oral work was more pronounced in Dinzi's classroom than in Haley's classroom. In fact in Dinzi's classroom both Dinzi and the students did very little written work.

Hayley assessed students' work continuously, used a variety of assessment methods such as tests, assignments, project and practical work, communicated assessment results to students timeously, accurately and clearly, recorded students' marks in her mark book, made assessment an integral part of teaching and learning, and provided assistance to those students who needed it during breaks and after school, while Dinzi seemed not to assess continuously, used only one test as a method of assessment, and seemed not have a mark book to record students' marks. The question is: Why? In

both cases, what students were to learn were not explicitly and clearly defined in most lessons; assessment activities did not focus on the achievement of clearly defined outcomes; the purpose of assessment was not provided; the criterion-referenced approach to assessment was not used; peer assessment did not take place; test questions focused mainly on factual information; and assessment of values and attitudes did not occur. This raises the question: Why?

Evidence from documents (A5 and B5)

While Dinzi had four documents, Hayley had a ‘thick’ file with fifteen documents related to assessment. This raises questions: Why the unequal distribution of assessment related documents despite both teachers teaching in the same province? How is each teacher’s assessment practice influenced by these documents? I have provided the names of these documents and described their content in detail in Chapter Five for Dinzi and Chapter Six for Hayley, so I shall not repeat them save to say that the only common document that they both possess is “Circular Number 5/2000: National Assessment Policy as it relates to OBE and the implementation of Curriculum 2005 and Assessment in GET Grades” dated 19/01/2000 from the provincial department of education. This circular claims that it “**aims to assist educators in understanding, developing and implementing assessment practices** that are appropriate for Curriculum 2005” (A5, emphasis in original). It is detailed in terms of what is expected of teachers (ibid). While Dinzi reported that she has read and understood it, Hayley reported that she found it difficult to understand. The questions that emerge are: If Dinzi understands the policy document, is she implementing in her classroom? If the answer is no, then the question becomes why not? Why does Hayley find the policy document difficult to understand? Does this difficulty find expression in her assessment practice and how?

Teacher Records (A6 and B6)

Lesson preparation

While Hayley had a file containing comprehensively prepared notes, worksheets, assignments, tests, projects, and a year plan for her class (I described and analysed

this record in detail in Chapter Six), Dinzi did not appear to have a lesson preparation file or book. This begs the question: Why?

Mark book/file/Recording sheet

During my observation period from July to September 2002, and follow up visits I did not observe Dinzi's mark book/file/recording sheet. However towards the end of November she showed me one for the first time, with marks recorded on the same form as the class register. I described and analysed this in detail in Chapter Five. But I wish to reiterate my concern: How did she arriving at the 'year mark' or continuous assessment mark that constituted 75% of the final mark for promotion purposes? Hayley had a mark book/file/mark sheets from July and she used it to record students' results. I described and analysed this in detail in Chapter Seven, so I shall not repeat except to say that she differed markedly from Dinzi in recording students' marks. Hayley had a number of sets of marks for each student indicating the different forms of assessment, for example marks for small tests, standardised tests, assignments, projects, practicals, portfolios, and specific outcomes 1,2, 4 and 6. Dinzi had not such marks. The question is why? Hayley computed all these marks to arrive finally to a mark representing the continuous assessment mark for each student for the year. This continuous assessment mark counted for 50% of the final promotion mark while the written November examinations counted for the other 50%. In Dinzi's case, the continuous assessment mark counted for 75% of the promotion mark while the written November examination counted for 25%. The question is: Why? Hayley complained bitterly about how she struggled with the new recording requirements and was still struggling with the complexities associated with recording results as illustrated below:

I don't have a clue how to record it. I don't know in which format to record it, because I have tried I don't know how many different types of forms to make it easier for myself to put these things in a way that one can use, So my frustration is how do we record and what we record. In the beginning it was told 1 to 5, then it changed to 1 to 4. In the beginning 1 was good and 4 was bad, this year 4 is good and 1 is bad, now I see again on the forms there is not a 1, 2, 3 or 4, it is now a star and a line and a tick or something like that. So for me all this change all the time is making the assessments a nightmare.

(B3)

This raises the question: Why did Dinzi not experience similar problems associated with what seems a complex recording process as Hayley?

Students' Records (A7 and B7)

Students' Note/Workbooks

In Dinzi's class, not every student had a notebook in class during the seventeen observed lessons. On any particular day only thirty to thirty five percent of the students had notebooks in the class. In fact on one particular day not a single student had a notebook in class (A4, 20 August 2002). Dinzi reported that the reason for this is:

They're just careless and lose them because the school provides them with notebooks

(A3)

While in Haley's class every student had a notebook in the twenty observed lessons. This begs the question: Why do students in Dinzi's class lose their books or do not bring them to class regularly?

Hayley had assessed every task (twelve) that had been individually done in the notebooks. She also wrote comments like "well done" or "very good" or "good" where it was deserved. But she initialled other tasks, and where she observed deviations she commented like "I miss your plant worksheet", or in others she commented "neat work". Students marked some tasks in pencil. Test question papers, including the June examination and marked answer sheets were pasted at the back of the notebook. All this did not appear in the notebooks of students from Dinzi's class, except for Dinzi initialling some books occasionally. The question is: Why?

Student Assignment/Portfolio

Only students from Haley's class had assignments or portfolios that I have described and analysed in detail in Chapter Six. I mention it here to show that this was not evident in the notebooks of students from Dinzi's class. Again the question invoked is: Why?

Record of Tests

The students from Haley's class had pasted all the test question papers with their respective answer sheets at the back of the notebook. Some were short tests (three) others were long tests (two) such as the standardised test of the first term and the June examination. The teacher marked these tests, and students had corrected answers in pencil indicating they were reviewed in class. No such evidence appeared in the notebooks of students from Dinzi's class. In fact it was very difficult to locate evidence of their past tests. Why?

Report Cards

First Term Report Cards

It is not possible to compare the first term report cards as only students from Haley's class brought them, while students from Dinzi's class were unable to locate them. Why were students from Dinzi's class unable to produce their report cards?

Half-Year Report Card

Both report cards were titled "Progress Report". While the report card of students from Dinzi's class had the space for the term and number of days absent left blank, the report card of students from Haley's class had it completed. The report card from Haley's class had the nine learning areas fully written out with their respective specific outcomes listed below each learning area, but the report card from Dinzi's class had the acronyms of eight of the learning areas (Technology was written in full) without their meanings and no specific outcomes associated with the learning areas. The report card from Haley's class had a "rating" next to the specific outcomes concerned and a key to the rating appeared at the bottom of the report, for example a rating of 1 indicated "not yet developed", while a rating of 5 indicated "Excels", and next to the rating column was a column that indicated the "percentage" that the student obtained for that particular learning area, while the report card from Dinzi's class had "mark achieved" next to the learning area, and next to this mark achieved was indicated "Effort Symbols" with symbols ranging from "A, S, NAS" with a key

at the bottom of the report indicating what the effort symbols meant, for example, “A” represented “achieved: (50% and above)”, “S” represented “satisfactory: (33% - 49%)” and “NAS” represented “Needs additional Support: (0%-32%)”. In the “Remarks” section of the report card from Dinzi’s class was written “Satisfactory”, while in the “Comments” section in the report card from Haley’s class was written “Lungiwe¹² has a wonderful, quit¹³ way of interacting in class – truly a pleasure to teach. Maths need special attention”. The analysis shows that the two ways of reporting assessment information is very different. The question is why and how does this different reporting process influence each teacher’s assessment practice?

Third Term Report Card

In both cases the students did not receive report cards for the third term because of the shortened school term.

Year-End Report Card

In both cases the title was “Report”. The report from Dinzi’s class again had the number of days absent left blank and acronyms of the eight learning areas as previously stated, but from Haley’s class the number of days absent was filled in and the nine learning areas were fully written. The report from Dinzi’s class was similar to the second term except that “Effort symbol” was replaced with “Level Achieved” such as “O”, “A”, “PA” and “NA” without a key to explain what they meant; but a key did appear at the bottom of the report indicating for example, “Level 4: Excellent Achievement (70-100%), Level 1: Not Achieved (0%-34%)”. The report from Haley’s class was completely different to that of the second term; it had symbols “O”, “A”, “PA” and “NA” with a key indicating what each represented. In the “Remarks” section of one of the report cards from Dinzi’s class was written “Achieved”; while in the “Comments” section in one of the report cards from Haley’s class was written “Promoted to gr. 9 in 2003. N.A.S in the following learning areas: MLMMS”. The analysis shows that the two ways of reporting assessment information is similar in that levels of achievement such as “O”, “A”, “PA” and “NA” are reported, but they

¹² Pseudonym used for the sake of confidentiality and anonymity

¹³ I believe it may be a spelling error for ‘quiet’

are also very different in that in Haley's class the marks achieved are not indicated. The question is why, and how does this different reporting process influence each teacher's assessment practice?

Examination Question Papers

June Examinations

It is not possible to compare adequately the June examination question papers because Dinzi did not have a copy; neither did anybody in the school, including the Head of Department of Science. However as indicated in Chapter Five, I examined the looses pages from students that resembled answers to the questions, and it revealed that three questions were set and all required low level, factual, short answers, such as "kinetic energy", and "conductors of heat" that carried two marks each. The paper set by Hayley consisted of two sections, section A and section B. Section A consisted of one question requiring short answers, for example multiple choice, true and false, providing correct terms and choosing from a given list of alternatives. It required factual recall of information and made up 25 marks. A prepared answer sheet had been prepared for the responses to this section. Section B had three questions, one based on a diagram, one on an experiment and one graph, each carrying 20 marks each. From this it seems clear that the questions set by Dinzi are simpler, while those set by Hayley are relatively more advanced. This begs the question: "Why the difference in the way they assess?"

November examination question paper

Dinzi's students were expected to respond to three questions with a total of twenty-five marks in one hour. All questions were low level, factual questions, such as, "mention three ...; what are; name five; calculate the ...". Haley's students on the other hand were expected to respond to a one-and-half hour paper that carried 120 marks. It had two sections, section A and B. Section A consisted of one question requiring short answers, for example multiple choice, true and false, providing correct terms and choosing from a given list of alternatives. It required factual recall of information and made up 40 marks. A prepared answer sheet had been prepared for

the responses to this section. Section B consisted of two long questions, each carrying 40 marks. Assessment was varied and balanced in terms of the assessment of different types of questions, assessment of knowledge and skills, and application of knowledge was assessed. It is clear that the questions set by each teacher are different. Hayley seems to set questions that are more varied and demand application while Dinzi seems to set low level factual questions only with very little variations to the type of questions. Again the question emerges: Why do they assess in different ways?

The analysis resulting from the comparison of their assessment practices suggest first that Haley's assessment practice is very different from that of Dinzi; second that Haley's assessment practice is congruent with her surface understanding of the policy, with her reported claims and with some of the policy requirements; third Haley's assessment practice is weakly linked to her less positive or negative attitudes/beliefs about the policy; fourth that Dinzi's reported claims do not correspond with her assessment practice; fifth that Dinzi's assessment practice is linked to her surface understanding of the policy; sixth Dinzi's assessment practice does not correspond with her positive beliefs about the policy and with most of the policy requirements.

Summary of Chapter Seven

In summarising this chapter I would argue firstly that both Hayley and Dinzi have different but superficial understandings, and varied beliefs of the new assessment policy, and secondly their assessment practices are different from each other, with some continuity and some discontinuities with the new assessment policy. The analysis invokes the following questions: Why do they have varied and superficial understandings and fluid beliefs about the policy? Why despite the positive beliefs about the policy they are unable to link their assessment practice with the requirements of the policy? Why despite their less positive feelings towards the policy they are able to implement some requirements of the policy? Why are there continuities and discontinuities between their assessment practice and the policy? I shall pursue these questions in the next chapter where I attempt to provide theoretical and empirical explanations to this complex set of issues raised in the study.