

Coping with fear of mathematics in a group of preservice primary school teachers

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Introduction

In this paper I describe my experiences of teaching a group of pre-service primary school mathematics teachers. Traditional academic attempts to teach content and “best practice” methodologies failed to address the crucial issue of fear of mathematics. This led to my search for a new framework in which to present both content and methodology of mathematics courses. I describe both practical and theoretical aspects of the emerging model and reflects on some of its strengths and weaknesses.

The quotation below came from the journal entry of a university student registered for a Method and Content of Mathematics course as part of the pre-service Teaching Diploma for primary school teachers.

Session Three dawned with new feelings of anxiety, and the additional fear of feeling foolish in front of everyone else who (I assumed) certainly would fare better than I in this lesson ... The maths becomes almost secondary. The responses triggered by merely being in this environment are astounding ... I think the maths teacher has a profound responsibility to his/her pupils. He/she is in fact a major player in the development of self-concept - and look how most of us look! Fearful, nail-chewing, shivering idiots - which carries over into all areas of life until it becomes so internalised that it becomes an integral and accepted part of our own self-image.

How amazing to think that maths has this power. In fact, not even maths itself, but the very thought of it. It is true to say that maths brings out every insecurity and vulnerability that we experience in our lives as a whole. We drag everything into maths - our whole life is laid bare and our defencelessness is exposed when we are forced to attempt to grapple with concepts that are beyond us. This learning maths is a painful process. It is not only about not grasping what is perceived as difficult, but it is also about myself, my very being, all that I am and all that I can offer. There is not more. When all is said and done, that is it. That is me. So subsequently I is reduced to someone almost unacceptable. I say almost, because it cannot be that this subject holds such power, yet for some, it is sadly true that they become victims - slaves of a foolish, inconsequential form of logic. And their lives are destroyed by it.

This is an extremely difficult course to run as there is generally a wide range of previous mathematics achievements levels amongst members of the class. In some years the spectrum ranges from a few students with one or two years

of university mathematics to, again a few, with no mathematics that has been passed beyond the first year of secondary school. Classes have ranged in size from fifteen to forty students over the past fifteen years. The dilemma facing the presenter of such a course is how to create a suitable curriculum that improves the mathematics content of those who need it and at the same time exposes the class to appropriate teaching methodologies. Most lecturers have followed the traditional route and separated the Method section of the course from the Content. Tests and examinations ensure that the students have absorbed the necessary amount of prescribed content to pass this section of the course, and examinations and, more recently, projects test the degree to which students have taken the methodology section on board. The environment is one of an academic course where students are apprenticed to an expert who tells them what to do and gives them models of best practice. The mathematics happens outside of them and they keep their distance without sharing much of themselves. They co-operate in the endeavour to learn and the successful ones are rewarded if they get good marks by passing the course.

The problem with such a course is that it does not begin to deal with the vast degree of fear and shame that seems inevitably to be present each year in the first session of the course, when students who are planning to become generalist primary school teachers arrive to participate in this compulsory module. Traditional teaching takes place in an environment of pride and embarrassment depending on the student's position in the hierarchy, with an accompanying stress on eye contact or avoidance. The lengthy but powerful, introductory quote is not an isolated occurrence and the question has to be asked whether student teachers who have such feelings about mathematics can possibly avoid passing them on to the children in their future classes—even if they manage to seemingly overcome these feelings and manage to pass the Method and Content course. Talks with mathematics educators

around the world suggest that this is not a phenomenon localised to the lecture rooms of Cape Town, but is far more of an international experience. The shock comes when one looks in the mathematics education field for literature on fear and trauma in the mathematics classroom and finds very little research that acknowledges this situation and even less that gives any direction for a teacher wishing to address the problem.

This paper will present the author's attempts at confronting the problem of existing fear of mathematics by drawing on practical activities as well as the experiential and theoretical motivations behind these activities.

Some guiding principles

In an earlier paper (Breen (2000a)), I have described some of the crucial foundational moves made in setting up a module called "Researching Teaching" in a recently introduced Masters in Teaching programme at the University of Cape Town. The aim of the module is to induct participants into a research methodology that allows teachers to investigate and improve their own practice. The module relies on several key shifts in attention from traditional academic practice, and these same shifts provide a useful template for considering the innovations to the preservice mathematics education course be described later in this paper.

The first step involved a shift from a "getting an education" paradigm to one of "becoming more experienced" and was based on the work of Gadamer (1975) and Olson (1997). In the "getting an education" paradigm, knowledge is an objective truth separate from the knower and it is the task of the expert to pass this knowledge on to the learner. The learner's task is to co-operate with the expert by apprenticing himself to the expert by endeavouring to understand and adopt the presented facts and discourse. The dominant modes of interaction are telling and discussion to argue the facts. "Becoming more experienced" presents a different challenge in that knowledge is now seen as embodied and constructed by experience. This means that the experiences of each participant are welcomed as important and unique, and the task of the teacher is to create the space for participants to engage with the subject matter. The relationship between the teacher and the learner is a collaborative endeavour and the dominant mode of interaction is conversation where each experience is presented in the form of a narrative. The crucial importance of this move to

any endeavour for teachers to research their own practice is more fully argued in Breen (2000b).

A supporting theoretical foundation comes from the adoption of the adoption of enactivism (Maturana & Varela (1986) and Varela, Thompson & Rosch (1991)) as a model of learning. Based on the work of Merleau-Ponty (1962) as well as Chaos and Complexity Theory, enactivism seeks a middle way between the mental and physical (inner and outer) by suggesting that the body is that which renders the world and mind inseparable. This means that any learning situation is constituted not only by the teacher and the learner but also by the content and the context of the situation, and that each of these factors plays a role in forming the interaction. Mind and body in each participant can not be separated and the basis of cognition is to be found in embodied action.

The third important phase involves the introduction of the concepts of "conversation" and different forms of listening. The aim of a conversation is to allow all participants to deepen their understanding of the issue at hand. Participants allow the subject matter to guide them without allowing issues of self to dominate. Davis (1996) draws on Levin (1989) to identify three forms of listening. *Evaluative listening* is the most common form in society where one listens to judge the value of what the other is saying. This would be the type of listening used in the "getting an education" paradigm where one's evaluation of the other persons statements would form the basis for the discussion in search of the objective truth. *Interpretive listening* allows the listener to focus on the teller and access the subjective nuances of what is being heard with a view to entering the teller's world with compassion. Both of these forms of listening fit into the mind/body divide. In the first the listener concentrates on the mind to judge the value of the facts and in the second the listener focuses on the self (body) of the teller. *Hermeneutic listening* does not accept the divide and requires the hearer and the heard to become involved in a shared project which respects the views of each as worthy of consideration, but uses the opportunity to explore what is heard with a view to coming to a mutually greater understanding of the subject.

Trying something else

A written paper can obviously not do justice to an interactive class curriculum. It can also not describe the nuances of each event and the way in which each class provides different journeys to the same beginning activity. The attempt below will

use “I” as a means of bringing the reader closer to the action, and the headings will attempt to give a flavour of the aim and tone of the stages described. It should also be stressed that the activities are not being presented as a model for others to follow but as a means to understand the process being attempted.

Bringing the body to the party

On entering the classroom as lecturer, I ask those present¹ to take out a piece of paper and to write down the words “I feel ...”. They are to complete the sentence and to keep on writing with each sentence starting with the words “I feel ...”. They are told they are not allowed to have blank pages and they may not just look into space. If they can not think of anything to write, they must keep writing “I don’t know what to write” until they do know what to write. I leave them doing this for about five minutes. Then I divide the chalkboard into three broad columns headed in turn with “Hopes”, “Fears and Anxieties” and “The Lecturer?”. The class is told that each person must come up to the board and write something in each column. Several pieces of chalk are provided so that more than one person can work at the board at a time and I make it obvious that I am not paying any attention to who writes what. Usually by this time, learners do not need a second invitation to come up and write, but if they are slow I badger the class and the ones who try to avoid participating.

I have come to regard both of these activities as crucial markers for the course. They state clearly from the beginning that this course is about much more than mathematics and that they will be required to participate with body as well as mind in the course. They are not present as mathematical machines in various states of functioning. They bring their feelings to the class as well as their hopes and fears.

Very apprehensive about doing maths again. I haven't touched it in about six years and it was never my best subject. In fact I can't ever remember a time when I enjoyed maths. I have felt nervous about it all day, hoping against hope that we have a patient and understanding teacher.

They are often pleasantly surprised at this initial stage that they are not alone in being frightened and insecure about their mathematical ability, and there is often a significant amount of relieved

¹ This is a university course, so it takes a few minutes for the whole class to be present and this seldom happens at the scheduled time of starting!

laughter as the writings in the columns becomes more and more honest and straight. The section on the “lecturer” is always interesting because, in reading the comments under all the headings, I can point out that I too have hopes and fears for the course (and usually it is clear that they have set me an impossible task in the optimistic range of their hopes), and also that I am forming just as many initial thoughts about them as they are about me (dress sense, manner, attitude and so forth). So before we have done any mathematics at all, the conversation has been started as we become aware of ourselves as thinking and feeling presences. We have also begun to negotiate a collaborative venture from what they have written on the board and from what I have responded.

Whose fault is it anyway?

The second half of the first 90-minute session of the year changes the mood of the class drastically. I tell them that it is now time to find out who can do maths and who can not. I tell them that they will be writing a test but that I hate tests so have asked a very traditional teacher, Mr Smith, to come and give the test. I warn them that Mr Smith is very fierce and will expect them all to stand up when he enters the room and greet him formally. I leave the room and put on an academic gown before entering the room as Mr Smith with a stern look on my face. Some giggle as Mr Smith enters and remain sitting. Mr Smith scolds them and tells them to stand when he enters the room and walks out. By the time he re-enters they co-operate and generally accept the role. Mr Smith gives them a problem in a rush:

Make as many different totals as you can using four 4s and the basic arithmetic signs. For example $4 + 4 + 4 + 4 = 16$.

He tells them to make sure they do not cheat by covering their work and then gets them to start. He walks around the room shouting at those who have not paid attention to the question (some only use two 4s; others write down a sum with a total of 16; and so forth). He tears up the paper of some and makes them start again. He looks for someone who seems to be doing well and praises them by saying he’s pleased there is at least someone present with a brain. He glares and shouts and intrudes on their space and then starts counting time down and makes them all put their pens down at the same time. Papers are swapped and marked and a standard pass mark set that is likely to have only three of the class passing. Those marginally failing have to stand to identify themselves, while

those failing badly have to stand on their desks so that everyone can note these people who can not even begin to do maths. Mr Smith storms out saying that he will recommend that the majority of the class be refused permission to do the course this year as they are incompetent. Mr Smith takes off the gown and I return.

The typical responses of a class are more fully described in Breen (1991) but there is always a rush for the class to respond to the question “So what was Mr Smith like?”. The rest of the session is spent talking about Mr Smith’s style and their own personal reaction to Mr Smith. The frightening aspect of the exercise is that each of them can immediately identify a “Mr Smith” from their own mathematics experience and some of them tell frightening stories of being physically or emotionally damaged by this teacher (one student had been tied to her chair, while another had had a hose pipe pushed down his trousers and the water turned on when he gave an incorrect answer so that it appeared he had wet his pants!).

The point of the activity is that each could relate to the presence of fear in Mr Smith’s classroom because of their own experience of doing mathematics. The role-play served to put them so strongly in touch with their past experiences that the subject of fear of mathematics could be owned by them all right at the start of the course. They could also begin to talk about the source of their fear and recognise that this had more to do with the personality and style of the teacher than with the content of the mathematics and their ability to cope with it. They were invited to tell stories about their experiences in a way where each person’s story was valid and contributed to the group’s understanding of the subject under discussion—fear of mathematics. Without being explicit about it, students were being asked to work within the different paradigm of becoming more experienced and introduced to conversations where their mode of listening was initially interpretive as they empathised with each other’s experience and then moved in a hermeneutic direction as the lecturer asked questions of each narrator in an attempt to pull the common threads from the stories.

Continuing the conversation

The difficulty with starting a conversation after the appearance of Mr Smith is that there is never enough time for everyone to have a chance to contribute their own story. Mr Smith’s appearance has also often proved a shocking reminder of the reality that some students’ experience of maths at

school and they become too frozen to contribute. It is sometimes only much later after the session is over that new memories come flooding back. Others have deeply entrenched ways of coping with maths lessons that involve their going to extreme lengths to remain unseen and unheard and this prevents them easily participating. It is for this reason that I introduced a task which requires each student to keep a journal for the class in which they are required to complete at least an A4 page for each session where they reflect on anything that came up for them during or after the session which gave them insights into themselves as learner, teacher or mathematician. In this way each student is given the opportunity to continue the conversation with the lecturer. Journals are taken in at regular intervals and replied to individually although common threads are sometimes mentioned in a classroom session.

Getting started with some maths

The visit from Mr Smith leaves most students shaky but in many ways encouraged as they can recognise that the nature of teaching to which they were exposed has played a major part in forming their views about mathematics. The challenge now is to attempt to give them the opportunity to gain a different insight as to the nature of mathematics. The degree of damage as described so eloquently in the initial journal entry that started this paper shows that this is not an easy task and the template of the “becoming more experienced” paradigm needs to be kept firmly in place. A sudden shift to business as usual and the “getting an education” paradigm is going to leave the class feeling cheated as the lecturer attempts to teach the same old stuff in very much the same old way.

As a first activity I like to use a problem known as *Arithmogons*. The class is given the following diagram



Figure 1

and asked what number should go in the middle rectangle between the circles. The crucial lesson here is for them to realise that an argument could be made for any number and that, as commonly occurs in the classroom, the teacher makes an arbitrary choice as to the rule that is to be used in this activity. In this case the rectangle contains the number which is the sum of the two circles. Using

this rule the class generates the numbers in a triangular shape

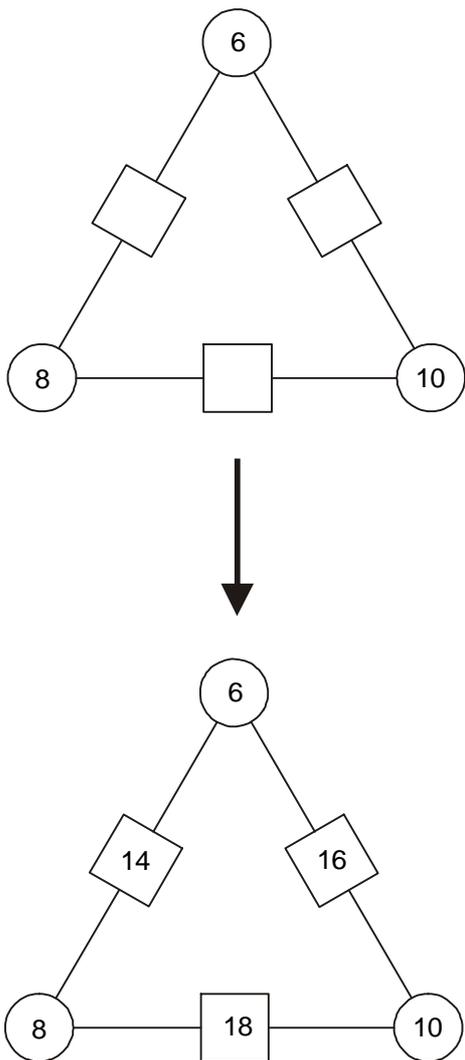


Figure 2

and is then asked to solve

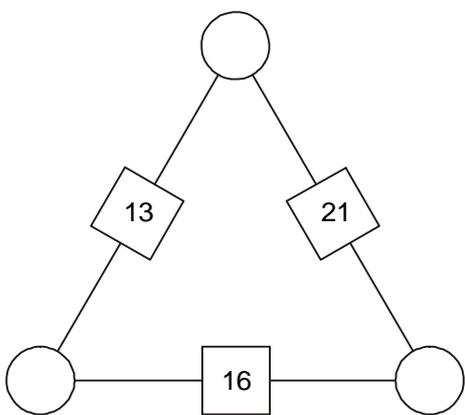


Figure 3

which is another problem entirely and the class can only complete it by trial and error! The class proceeds with the students being referred back to the original triangle (Figure 2) and asked the question “What do you notice?”. Each contribution is written up on the chalkboard as “Ruth’s Law:”, “Mthunzi’s Law:”, etc. and is written up even when it appears the same (e.g. All numbers are even numbers; All numbers are divisible by 2). When a collection of at least 10 observations have been given, attention is turned to the completed example from figure 3, and the class decides which observations are specific and which seem generalisable. In doing this, on occasions students re-describe their observation in less specific terms to make them valid in both situations. The activity ends when the class is able to solve any triangle using the generalisable observations of the group.

New rules of play

While several students remain silent during this activity and others do not understand how the solution was reached, several features of the way of working impress themselves on the students and begin to set up the necessary new culture of the classroom. Each student was able to contribute what they saw and to own that observation without the judgement of the class. Each observation was respected by the teacher and written down. Students were able to listen to other’s contributions and commented that this stimulated them to explore different possibilities.

At this stage several further foundational frameworks are introduced. The first draws on a quotation which stresses the importance of preserving and working with one’s ignorance. A second, but this time paraphrased, quotation from Robert Bly (1989)— “In a traditional mathematics classroom there are a set of rules and if you get something wrong, it leads to shame. In a playful mathematics classroom, there are a set of guidelines and if you do something different, it leads to conversation”—helps to reframe an attention to wrong answers. Correct answers only show that the teacher has not set good enough examples because there is nothing to work with. However, wrong answers are much more helpful because they give the teacher and class something to work with!

An additional “rule” stresses that this teacher is not in the business of giving out “hugs and kisses”. Learners should derive their own satisfaction from understanding something or mastering a skill—no-one will ever be able to share it properly with

them. Similarly, calling out an answer or telling someone else an answer is not helpful as it selfishly prevents the other from the same opportunity for learning. This picks up on the necessity in conversation to relegate the importance of “self” to a minor role in comparison to the subject matter. Similarly, when working with a partner, it is not helpful to them to rehearse for them what you already know. This is the well established pattern of “discussion” in the “getting an education” paradigm. Rather you should engage with them in a conversation where you ask them what questions about what they know and try to enter into their space as a learner about their understanding. The empathy of interpretive listening is there but the task of the “helper” is to move to a hermeneutic listening interaction. Finally, the common large gestures given in class by those who have completed a task are taken to be signs of failure rather than success, because it is clear that these students have not been able to ask themselves an interesting “What if ... ?” question that leads on from the work that has been covered. This is usually the appropriate place to end the first session and each student is given the opportunity to end the lesson by looking back at what has happened and saying where they are now. In this way, the attempt is being made to ensure that the enactivist principle of the integrated mind and body is still informing and directing the practice of both lecturer and students. Students are given a reading entitled “A Cautionary Tale about Rabbits and Moles” (Breen (1990)) which will serve as a course outline for them.

This maths lesson was like no other I have ever attended. I love the way Chris mixes subjects, the way he uses quotes and poems like this in the maths class, the way we are allowed to say how we are feeling - I am being treated like a person. None of my maths teachers has ever considered how I might be feeling. I am inspired - I want to be like this when I teach. I find myself more excited than apprehensive about what is to happen next.

Moving forward

The second session starts with a space for students to talk about the reading and then inserts the last important piece into the picture by giving the class an assortment of pictures to look at where different things are seen depending on the perspective. They are encouraged to move around the classroom, to stand on their desks or to sit on the floor to try to get a different perspective that allows them to see the hidden picture. They are told that they will be encouraged to re-own their

powers of visualisation as a means for solving mathematics problems.

How different I feel today as I walk into my maths lesson - could it be that I'm actually looking forward to it? Surely not!

Despite the poem and Chris's efforts to calm our nerves I feel apprehensive again - am I going to make a fool of myself again? This fear of making a fool of myself is so ingrained in me. I know how slow I am at grasping mathematical concepts. The mental block has descended once more and I spend the next few moments really confused ... I feel that my grasp on maths is so slight that if I don't write down every single thing we do I may lose my grip on it.

They are then each provided with a box of matches and asked to make the first picture in front of them (Figure 4) and then the second (Figure 5) and then the third (Figure 6). They see that they needed 4 matches to make Figure 4, 7 matches for Figure 5, and 10 matches for Figure 6. They are then asked to continue with the pattern in a straight line in their imagination and to write down the number of matches that they think will be needed to make the tenth picture of the series.



Figure 4

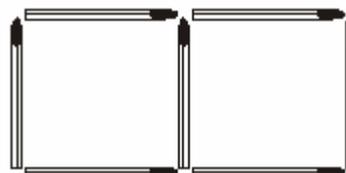


Figure 5

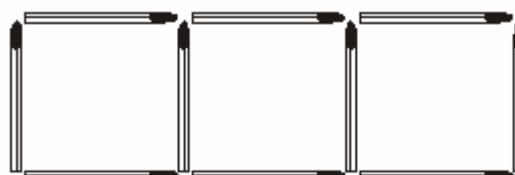


Figure 6

Once they have written down their answers, they should check whether their answer is correct by building the tenth picture with matches. They are then asked how they arrived at their answer. Again, the environment has been set to minimise the possibility for shame. No answer can in fact be wrong since it is the way they arrived at their answer that is being stressed - not whether they were right. In answering the question of how,

students come up with a variety of responses that are explained to the group. Each student tells his/her own story and the conversation that develops is about the rest of the group understanding the teller's insight. Some count on in 3s. Other common responses go along the following lines:

- i) I saw there were 10 already and I needed another 7 blocks that are each 3 matches so my answer is $10 + 7 \times 3$.
- ii) There's 4 matches in the first block and then another 9 blocks of 3 matches so it's $4 + 9 \times 3$
- iii) There're 10 lots of 3 matches plus 1 extra at the beginning: $10 \times 3 + 1$
- iv) We've got 10 for 3 blocks. If I add another set of 2 lots of 3 I get 30 plus another 1 block gives me 34, but there are 3 overlapping places so it's $34 - 3 = 31$
- v) There are 10 on the top and 10 on the bottom and 11 standing vertically, so $10 + 10 + 11 = 31$.

Once all methods have been explained we go on to ask a series of additional questions: "How many matches will be needed for 20 squares?" "Which method did you use?" "Is any method more appealing than others at this stage?" "How many matches for 100 squares?" "And for n squares?"

In this way the class has been introduced to some of the basics of algebra through a concrete and visual approach. During the activity students are asked to be aware of their feelings as they engage in the task. When they feel panic spreading, they are asked to try to stay with the panic, rather than follow their usual coping mechanisms such as closing down on thinking or building an emotional wall around themselves. They are also asked to try to describe what the panic feels like and how they respond to it in their journals.

Exploring further

The purpose of this paper is not to attempt to describe a curriculum for primary school mathematics teachers but rather to illustrate how the general theoretical principles of the "becoming more experienced" paradigm, enactivism, conversations and hermeneutic listening generally inform and direct the conception of a different approach to the course. The overarching concern is to confront the huge degree of fear that is present in each class by drawing it out and getting students to engage with that fear rather than relying on old attitudes of accepting failure, or escape into denial and further shame. The rest of the paper will pick

up on some of the remaining features that need addressing.

Searching the literature

It is alarming that there is an almost total silence on this issue of fear of mathematics in the literature of mathematics education². It does come up in research that deals with attitudes and beliefs in mathematics education, but seldom do writers tackle the issue in more than a reporting way. Even the *International Group for the Psychology for Mathematics Education* (PME) seems to interpret the concept of Psychology almost exclusively in a cognitive sense rather than also in a Psychoanalytic or Psychotherapeutic sense, the need for which seems to be indicated by the degree of damage that obviously resides in these students. One important exception is the work of Early (1992) who has invited his mathematics students to think of a recent mathematics problem which challenged them and then to find and write about fantasy images which capture the same feelings that they had experienced with regard to this problem. The reported images are extremely strong (some involving life-and-death situations) and Early analyses them in terms of a theoretical framework drawn from the work of alchemy as interpreted in Jungian psychodynamic theory. A first reading of this work suggests that some of the moves made in the approach which has been described in this paper parallel stages of the alchemic process described by Early and attention to the inclusion of some of the missing stages could well further enrich the programme.

This mention of psychoanalytic dimensions needs to be explored a bit further. The role-play of Mr Smith and the ensuing memories of a source of the present fear expressed bring aspects of the task of a therapist with them. This is an aspect of teaching that is seldom addressed directly in the preparation of teachers and is beyond the scope of this paper. However, Blanchard-Laville (1991) has conducted some interesting research focusing on the role of the unconscious in decisions made by the teacher. She developed a system for training mathematics teachers based on the work of the Balint group, in which the teachers do psychic work with her linked to their professional practice. The focus of the meetings is to examine the psychological implications of their own accounts of teaching incidents with a view to gaining access to their unconscious. Her work has led her to

² A fuller discussion of the issues raised in this section will be found in Breen (2000c).

believe that teachers can develop greatly through this approach so that they can better identify what is at stake for them in classroom episodes. In this way they can become less “split” inside themselves and more flexible and alive in their exchanges with pupils. Any teacher working in a more collaborative way needs to be aware that s/he is entering some murky and uncharted waters where the unconscious will want to join the act.

Forcing awareness and the unavoidable double bind

Part of the challenge of the teacher as described in the paper is to move the conversation into a hermeneutic stage where parties work together on the subject matter. The opening encounter with the students and the setting of the scene has been described at great length because experience has shown that this is the crucial first step. An earlier example that occurred before the importance of the first step had been fully realised illustrates this point.

At the start of a lesson I noticed that Paul was talking to his friend and openly showing me that he was not paying attention. I walked across and showed them what to do in then problem that had been set. Paul responded that they were talking about something else, much more important than mathematics. There was a defiant challenge here and I was put on the spot to choose an appropriate course of action. In the end, I said, “Fine, but outside is probably a more appropriate place to go and talk about non-maths things”. Paul glared at me and clenched his fists. I said, “I know you want to hit me but it’s my class and I’m afraid we have to do maths here.”

It is clear here that the teacher has fallen back into the “getting an education” mode and has invoked the authority of the expert in order to attempt to get Paul to co-operate. There is little chance for collaboration and the most that can be expected is some sort of co-operative venture. This is in fact, the way that I took the issue forward.

Paul and his mate started to get up to go when Paul said, “I’ve given up on maths and I don’t want to talk about it because you are part of the problem!” His friend Pedro at the next table said, “I agree”. I decided to leave Paul and went across to Pedro who was tight and tense. I talked gently to him and tried to make a plan. He told me that he was struggling with the basic maths and yet I was expecting him to work on the methodology. He was lost and had no chance of coping. I told him that I would change the structure of the sessions and treat the method section as an opportunity to do basic content if he’d prefer that. He agreed and undertook to ask me for help when he struggled. I then went back to Paul and told him of the plan I had made with Pedro. I offered to do the same with him, but he’d have to decide if that was what he wanted. To my surprise tears came to his eyes and we adjourned to my

office where we were both able to tell our stories about an incident which had happened the previous week and had led to his dissatisfaction with my teaching.

The hermeneutic task of the teacher is to ask questions and challenge the student in a way that forces the student to become aware. The double bind involved in the approach described in this paper, is that while the method is based on a crucial shift away from the “getting an education” paradigm, the course itself is offered in the very institution which has been set up to practice this paradigm—the university. This site then determines certain “non-negotiables” such as the awarding of marks and the setting of the curriculum by the lecturer. In order to have a chance of creating a different environment, the lecturer needs to be clear as to what s/he believes is achievable and act thereafter with integrity in sticking to this environment even when it becomes uncomfortable. The teacher is inviting the class to place their faces in the open and to work with them. This requires an enormous amount of mutual trust which the teacher, in particular, will have show s/he deserves. It would be a major act of betrayal if the teacher proved to be unworthy of this trust.

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