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Appendix 1

Focus groups interview guide

In your opinion:

1. What are the advantages of mixed-ability classes? Themes for probing to include: effect of mixed-ability grouping on achievement, affords teachers opportunities to make use of student-centred teaching strategies, role models, equalization of educational opportunities, avoids labeling of slow learners.

2. What are the disadvantages/problems of mixed-ability classes? Themes for probing to include high achievers getting bored, failure by teachers to cater for the varied ability levels, class sizes, syllabi laden with content, learners’ English proficiency, teachers’ limited teaching skills, need to cover the syllabi before examinations.

3. What would you recommend regarding the teaching of mixed-ability classes? Themes to include student-centred teaching strategies such as cooperative learning, small-group instruction, problem solving, discussion, discovery and project strategy. Differentiating instruction; remedial teaching, scaffolding, enrichment, compaction and extension.

4. Keeping mixed-ability classes in mind, what is your opinion on a shift from norm-referenced to criterion-referenced assessment? Themes to include fairness of the assessment systems in the context of mixed-ability grouping, i.e. whether or not the assessment systems cater for individual differences.

5. To what extent are (a) pre-service and (b) in-service teachers trained for the teaching of mixed-ability classes? Does the training make deliberate attempt to equip teachers with mixed-ability teaching strategies or not. Teachers to comment
on the nature of teaching practice, nature and effectiveness of in-service workshops

6. Is there anything else you would like to add regarding mixed-ability classes?
Appendix 2

Follow-up interview guide

1. What teaching strategies are you presently using in your mixed-ability classes? (The following to be asked depending on the responses from interviewees)
   1 May you comment briefly on the effectiveness of the strategies that you are presently using.
   2 In your mixed-ability classes, how do you assign students for group (to be asked if teacher says he/she use group work, peer teaching, cooperative learning, small-group instruction)?
   3 What is your comment regarding the level of participation by students of different abilities during group discussions?
   4 How can teachers solve the problem of domination by high ability students during group work?
   5 During group work how do you set the assignments, same level of difficult or differentiation?

   In your opinion:

2. What teaching strategies do you think should be used in mixed-ability classes? (Probing question) If you are not presently making use of these strategies, what are the constraints causing you not to make use of these strategies? Themes to pursue include teacher-pupil ratio, time constraints, and the need to cover the syllabus and teachers’ lack of teaching and organizational skills

3. During instruction, how are you making effective use of the students’ individual differences in order to make your teaching effective? Themes to pursue to include setting assignments calling for students’ use of their diverse abilities through cooperative learning.
4. What differences are there between teaching strategies for ability grouped classes and those for mixed-ability classes? Themes to include varied teaching strategies to cater for students’ different learning styles, time consuming, complementing strategies with teaching aids.

5. During our focus group interview, the general feeling was that pre-service and in-service teachers’ training are not adequately preparing teachers for mixed-ability teaching. In your opinion, what organizational and teaching skills do teachers need in order to teach mixed-ability classes effectively? Themes to include differentiating skills, mentoring skills, skills in organizing and managing group work, motivational skills and flexibility in the use of teaching strategies.

6. Is there anything else that you would like to add regarding the teaching of mixed-ability classes?
Appendix 3

Transcripts for focus groups 1 and 3

Transcript for focus group 1

KEY

*Italics:* Interviewer

After each response, a line is skipped.

( ) Translation into English from Setswana

[ ] Coding range

**TRANSCRIBED TEXT**

*In your opinion, what are the advantages of mixed-ability classes?*

[Mixed-ability classes are just an extension of what we have in society, because outside there we don’t have places where people with certain qualities stay alone, but we all stay together]. [Therefore mixed-ability classes also show from the beginning that people should learn to work together not despise each other]. [Because if we are going to have those classes for the bigger ones, those which are bright and these ones for the poorer ones, then there is eventually a division, we have those ones, and these ones. In society it’s not like that]. If you have a mixed-ability class and you have students who are outstanding in that class you can always [have a chance to make manageable groups] [in such a way that in each group there is the leader who is outstanding there and then explain to others instead of having a class where there are no other good ones, all of them are slow learners. In that case the teacher will have to move from point to point expressing maybe the same...]

**CODES**

reflect society.

working together.

division.

group work.
point, but if some students are bright and get the point easily then they can explain the point to their group members while the teacher is helping others. What I am trying to say is 1, 2, 3, Ntesang is good, he understands something he can explain to his group members, Modongo does the same with his group, and I do the same in my group, while the teacher attends to problems here and there].

Okay.

[But eh, maybe if you put the low achievers with those who are high flyers, low achievers will feel left out because really they are not going to contribute anything in that group they are in]. [So maybe sometimes it is better if low achievers are grouped on their own they can discuss].

[But sometimes if higher achievers are in a group with slow learners, they just dominate. They just write all the points] and the [low achievers don’t say anything].

[Maybe if higher achievers and low achievers are in the same class, maybe some of the low achievers may get inspired by the higher achievers, and try to study hard. Unlike if they are all low achievers, wabona (you see). They know that if the highest is maybe 30% and so students will not work hard, but if maybe they are high flyers, low achievers will try to push hard].

[Maybe if you go to a low class where the students will not participate, you are just going to be talking alone] (laughter from group members). Sometimes if you give them an exercise, they won’t write anything [maybe they told]
exercise they won’t write anything [maybe they told themselves that they won’t pass]. [This makes teachers to develop negative attitudes].

[Low achievers will benefit from high achievers as high achievers keep on giving answers, they learn something. Students learn better from others].

*There is an argument that mixed-ability grouping affords all children equal educational opportunities. What is your opinion on this?*

[But I don’t think that there is that equal opportunities because you come with], I mean you present content and obviously you have to [use a number of teaching strategies if the students are to have equal opportunities and not just ordinary application of strategies that we use, general ones]. [So it will take time to cater for different capabilities of students]. What I mean is that if you come up with a content you [try to sit down and find out how you are going to meet the needs of the lower achievers, average and even those who are high achievers on the same content].

*If I get you properly, what you are saying is that mixed-ability grouping on its own does not result in equal opportunities, but teachers must come up with teaching strategies that will ensure that all the students are going to benefit.*

[Yes. In fact I feel that it is ability grouping, which actually caters for equal opportunities], by teaching same content, but the way you disseminate it, [the strategies that you use to teach]

| exercise they won’t write anything [maybe they told themselves that they won’t pass]. | self-fulfilling prophecy. |
| [This makes teachers to develop negative attitudes]. | teachers negative attitudes. |
| [Low achievers will benefit from high achievers as high achievers keep on giving answers, they learn something. Students learn better from others]. | role models. |
| *There is an argument that mixed-ability grouping affords all children equal educational opportunities. What is your opinion on this?* | no equal opportunities. |
| [But I don’t think that there is that equal opportunities because you come with], I mean you present content and obviously you have to [use a number of teaching strategies if the students are to have equal opportunities and not just ordinary application of strategies that we use, general ones]. [So it will take time to cater for different capabilities of students]. What I mean is that if you come up with a content you [try to sit down and find out how you are going to meet the needs of the lower achievers, average and even those who are high achievers on the same content]. | teaching strategies. takes time. differentiating. |
| *If I get you properly, what you are saying is that mixed-ability grouping on its own does not result in equal opportunities, but teachers must come up with teaching strategies that will ensure that all the students are going to benefit.* | ability grouping provides equal opportunities. |
that same content is different. To the low achievers, you know that you are teaching low achievers and you try to break the content to their level, and to the higher achievers, you are trying to bring the content to their level. And therefore, one topic, one content, the way you dispose it to different levels, I think that one is equal opportunities, unlike if you are bringing the content to a mixed-ability class. [If you bring one content to a mixed-ability class, you might find that you are only targeting the high achievers, while the low achievers are left out]. [But in a case where they are grouped according to ability, I think there is equal opportunity; even though you are treating the same content because you have the knowledge that there are low achievers and high achievers].

Nna (me) [I don’t think there is equal opportunity if they are mixed-ability grouped, once they are in the same class], because by the time when you try to split the content into e-e, simpler form so that the low achievers can get it, you are [wasting time for those who are bright, because they have already got what you are trying to explain]. Because if you bring it back, so that they all get what you are trying to say, [high achievers will be bored].

But in Maths it is very simple (laughter). What you can really do when you are giving students exercises, [you have to give work for all the three groups (high, average and slow learners)]. So you know that the slow learners are going to take long to finish the work, fast learners you give them extension work].

*If I get you well, you are saying that it is easier to teach Maths to a mixed-ability class than otherwise?*
Nna (me) I have got a question. How do you group students in class, maybe if you want to select, the best, average, and low? You cannot say higher achievers you are always on this side. Maybe I am on a new topic for a period. How do I simplify that information in order to cater for all groups?

*She is saying how do you group students in class?*

You can give students oral questions, the way they participate maybe that is the best way of doing it.

Gakiri (isn’t it) with Maths what do you do? You just give an exercise, and collect books and mark. I think, I am talking of things like maybe you are to explain, like us with the issue of things like writing notes. Lets say maybe the topic is about castration, I am asking, how will you group in a class?

Gore (he is saying) [in Maths they give the higher achievers something challenging, and give the low achievers something which is according to their level of understanding]. Her question is how do you, e-e divide them?

We don’t go to students and say you do this one, you do this one, [we write the exercise on the board and say if you finish this one go on to the next one, because we know that slow learners are going to take a long time to finish the work, and the higher achievers are going to take very little time to finish,
the higher achievers are going to take very little time to finish, if they finish, they continue]. That’s how I am doing it.

*Okay sir, if you don’t mind I would like to come and observe one of your lessons.*

Honestly, I don’t understand a thing about these equal opportunities. You can be given equal opportunities but it doesn’t mean that you are all going to benefit, but they were given to all but we don’t benefit the same. What I am trying to explain is that we [teachers we have attitudes]. [If I have got a class say 3F, which is stream A, when I go to that class I will always have that mentality that it is a good class and I will present to them in a good way. But to the other classes, I will go knowing that they can’t make it]. In that case, the way I understand it, I will not be giving the children equal opportunities. If my delivery is the same in all the classes, I will be giving equal opportunities, not meaning that they will benefit the same.

*Lets go back a little to the Maths example, where different ability levels are given differentiated work. At the end of the day, will the different ability levels cover the same content?*

*Gakiri* (isn’t it) you plan, [you know that the slow learners cannot grasp a lot of information than fast learners, so what fast learners will learn will be more than slow learners, because of their different capabilities are not the same. For the day, higher achievers will learn more].
Okay. How do you reconcile that when it comes to end of month, term, year and final examinations?

In the end of term test, [when I set the test, I will set the standard that each …they will be some questions gakiri (isn’t it) for the low achievers, I know that they will get a certain mark or certain questions. If they get them correct, then I will know that they have learnt something. Even if they don’t get a good pass mark, but I know that what they have learnt they have done it well in the test].

I think the speaker is trying to defend himself (laughter). [When it comes to allocating activities, or even monthly tests or exams, we normally set the test that all pupils are going to attempt, the slow learners and the high achievers]. Looking at that, [it means the higher achievers are going to benefit from what is being set, but the low achievers are not going to get more marks because they are normally given low or simpler activities during the class, but when it comes to exams, they write the same test as those high achievers so it means only the high achievers can get something from what is being set].

You didn’t get me clearly.

From what I … when you first said it, I thought what you meant was if you have, maybe you are covering, I don’t know much about Maths, or maybe [you are doing ‘probability’ and then you take that, gakiri (isn’t it) they are some exercises about ‘probability’, now what is going to happen is that they are going to give exercises. If you finish this one, you can...
are going to give exercises. If you finish this one, you can have more practice on exercise b, then go on to exercise c. Only the difference will be that the slow learner hasn’t had much practice, except that he did one exercise, whereas the high fliers will have done a, b, and c, which amounts to more practice].

So she is just capturing what you have been saying.

Yes (laughter from group members). I was saying that gakiri (isn’t it) [the slower learners they cover little work in class when maybe I give an exercise, those who are high achievers will work even on challenging questions, you see that? So when I set a test, I also include those questions that are challenging, but I know that slow learners will not get those questions. If they get some of the questions, I know that they have achieved my goal or my objective].

In your opinion what are the disadvantages or problems of teaching mixed-ability classes?

[Emm the first thing is that take for instance our classes here you have a very brilliant child, like a 100% child and then you have someone who doesn’t even know how to write his name. Maybe his name is Rueben, but sometimes he writes Reu, sometimes he writes Rue, so you know as the teacher tota (really), sometimes even when you go to such a class you don’t even know what to prepare for that child. Because it looks it’s not just being a slow learner, it’s just being eh… [you don’t even know how to handle that kind of a child, so it’s one of the special needs education. teachers lack skills. differentiating.}
problems because sometimes the gap is just too wide and you don’t know how to tackle some issues].

[Sometimes the students themselves think that they are being undermined, especially the low achievers. Once you go there carrying something for them, they think they are being undermined, they have already failed the exams before they even write them]. But wena (you) try to help them, so at the end they can at least score something.

Yes, another thing, [another problem is lack of time]. You see e-e, [when we look at the teacher-pupil ratio, our classes, some we have 40, and others 30 something students], and then eh, when we look at time, eh, these 40 minutes we are given eh, to cater for the mediocre, slow learners and high fliers, ah, actually it [demands more time than the one we are given]. E-e, you might find that within this little time we are given, you can just try to [rush over things] and the [slow learners are left behind], considering again that [we have to cover the syllabus], and [time is not on our side] to cater for a group of people who are mixed, unlike if we were to maybe cater for slow learners alone, mediocres alone and the higher achievers alone, [then it was going to be a bit easier looking at the time factor].

I think sometimes it [demotivates the higher achievers]. If you are a higher achiever in a class with slow learners you grasp everything you find that whenever the teacher teaches [slow learners will take time to learn that simple thing]. You find it’s not worth it to be in that class, wabona (you see)? So you find that [students will be demotivated and say why should I be in such a class where some do not participate or do not go at my
At the end the high achievers may end up being mediocre or slow learners, its possible.

The other thing is that it’s like most of the teachers we concentrate on higher achievers, because they seem to be extroverts, they are our key indicators, because in a class if you are teaching: Did you understand? Did you not understand? The higher achievers they are the ones that can tell you whether they have understood or not. The rest: Did you understand? They always say ‘Yes’! Ask a question, *tuu*! (silence) So you find that eh, in most cases the higher achievers they understand quicker, and teachers, if we ask them, you will find that if the higher achievers have understood, some of us we often give little attention to the low achievers.

The other thing is that usually we concentrate much on slow learners and high achievers and we forget about average achievers. It’s either we are too fast or too slow, if we are slow we cater for slow learners, if we are fast, we cater for fast learners, and forget about those in the middle. [Maybe the problem is that we have not been trained to teach mixed-ability classes, so we have difficulties in teaching mixed-ability classes. If we had been taught, we could be handling them very well].

We usually forget the slow learners] and [just tell ourselves psychologically that they won’t learn anything after all why should I go back and re-teach because they are not going to understand what I am teaching. As soon as higher-fliers get what I am teaching, I proceed]. That is another problem.
So in a way you are saying teachers have low expectations of low achievers?

Not all of us, it depends on whom you are. Because some teachers are very slow, so that they cater for those who are slow learners, and forget higher achievers, because they know that they can understand everything.

In a way what you are saying is that it is difficult to cater for all the ability levels at any given time?

Mmm. Yes. Yaa. (heard from different group members).

I think my colleagues have said all the problems (laughter). [It’s about time] and then [some students loosing interest because it happens every time. You come you repeat, you teach this, you present this. You can clearly see gore (that) these ones don’t understand, the bulk don’t understand. And once you try to repeat it over and over again, you see gore (that) someone who is your best striker in class is doing something else, is no longer with you, you have lost him].

[When the teacher asks a question, slow learners are not sure they always look up to fast learners to provide answers].

[There is no competition].

In literature on classroom teaching, some teachers complain of the English language, in those subjects taught in English. In this school, are you finding this to be a problem?
I am a teacher of English, it is a big problem).

It is a problem, e-e, to the kids, sometimes they don’t understand the language. [Even we teachers we have got our native languages it is very difficult sometimes to express ourselves using the English language, then what more about the kids?] It is like you are speaking Greek to them. So language is a problem. They are those who would understand quickly, [those who will struggle to understand, eh, even one sentence that you have said, so it is a problem, especially in mixed-ability classes. It is like to others you are not communicating at all, but you have to say it, you have to teach in the language of instruction].

Mmm, I have found it like the previous speaker is saying, [the language is one of the problems why they don’t understand. Take for instance a subject like Music, you know it is so foreign to them and so they have two tasks when they are listening. They have to listen to what you are saying in English and the very new material that is presented to them at that age yabo (of) 13 and 14 years old. So it is really a struggle when you try and teach them such new material that they haven’t been exposed to], so sometimes, tota (really), I know we are expected to teach in English, but sometimes as a, e-e, second hand, ga-tweng (what is it called), [as a second language speaker you are forced to say this is how it is in Setswana and you have no option, but afterwards you will see them, ‘Oh! Is that really!’ And then you even see slow learners try and come up and say ‘Oh! So this one plus this one, is really this one, so these notes are like this’, or something like that].
that].

_Yone_ (it) [the issue of language in this school is a big problem], don’t forget that it is not only English which is a problem, even Setswana is a problem to these students because Setswana is also a second language and English becomes a third language. So they have a problem in all the two official languages. And they also have maybe an attitude towards Setswana, they say why should they be taught somebody’s language who is in our country, why don’t we learn our own language. Such things discourage them from learning the language.

[And this is not just our problem _hela_ (only) in this school, because this morning I was reading that paper on past examinations _tsa_ (of) last year, and there is a clear report that most of the students are unable to express themselves. It further says that they cannot even understand maybe what the question is saying]. [What I normally do with my students maybe after a test, when we are revising that test, I will just read the question and then I ask if they understand the question. They will say ‘No’. Once you start putting it in another way, _gore_ (I mean) changing it, they realise that they got wrong a question which is actually very very simple]. _Kera gore_ (I mean that), _tota_ (really) reading _mogobone_ (to them), and just communicating is a really problem, and this problem is a national problem.

What would you recommend regarding the teaching of mixed-ability classes?

We don’t have the strategies Mr. Mafa, because [first of all at college it was not catered for during our pre-service training, not trained for mixed-ability teaching.]
college it was not catered for during our pre-service training, that mixed-ability was not catered for so we don’t have strategies].  [We are struggling, we are failing]. That is why at the end we concentrate on higher achievers, because we do not have the technical know how.

*Yes, but what methods are you presently using? Is it whole-class? Are you giving notes.*

Ya-a, we just teach them the [same and give them same stuff. In group discussions we just group them anyhow, we don’t say these achievers should be in this group. In a language lesson you see, when teaching them a language, you just group them anyhow, and give them same notes, same stuff].

*Nna (me) in Maths I use the approach I explained at the beginning.*

Ya-a. like we said [it’s difficult], but in our subject Social Studies we sometimes [make use of group work. Under a topic you can give tasks to students to discuss in groups so that they share ideas, opinions. *Gakiri (isn’t it) it is a mixed group, made up of mixed-ability students. As they discuss, the teacher moves around, to check on progress. After discussions, there are group presentations, feedback].*  

[In most cases I use the lecture method].  It allows me to present my things, the way I want. Thereafter it gives a chance to move around. This can only happen if I am not dealing with practicals. [With practicals, the lecture method gives direction, demonstrations and failing, struggling to teach mixed-ability classes. whole-class teaching. it is difficult. group work. lecture method.}
then demonstration or group experiments, with those materials they can handle. Of course I can’t let them handle chemicals like sulphuric acids, on these I just demonstrate.

I don’t know whether it’s a strategy or a method, but there is this other one called [role play. Eh, if you are teaching a mixed-ability class, sometimes you throw in a topic and you challenge students to say, supposing you were this person, responsible for this thing, what would you do? Well of course the higher achievers will come up with different opinions, the middle ones and the low achievers but the point is that you want students, eh, to be put in the shoes of somebody who is responsible for a particular thing so that they think, and try to be real, something to be real to that child]. It is one of the strategies that we normally use here in this school.

[Teaching aids can be used for the clarification of some concepts, more especially those concepts which are abstract. Even the slow learners can grasp something from what is displayed, e.g. when models and charts are used as teaching aids].

Teaching aids may mislead at times if not well used.

Keeping mixed-ability classes in mind what is your opinion on a shift from norm referenced to criterion referenced assessment?

Repeat your question.

Keeping mixed-ability classes in mind what is your opinion on...
a shift from norm referenced to criterion referenced assessment? The RNPE of 1994 recommended a shift from norm referenced which is about ranking of students, to criterion referenced assessment, which is about competences, i.e., what the student has actually learnt, as compared to how the student compares with others who will have sat for the same exam. What is your opinion on this?

Mmm, *nna* (me) [I think it can be a good move if these students can be catered for outside, especially if they are looking for employment. But if outside they cannot be catered for, there is no use moving from norm to criterion referenced assessment].

[Like she said, *kana* (isn’t) we are competing with the international world, so if I am taking a student here because she can do A, B, C, without comparing her to her American counterpart, then how is she going to be able to, *gakiri* (isn’t it) we have this Vision 2016, how is she going to be able to, you know, to work hand in hand, like compete with an American who is coming here to Botswana to do something staff like this, and how will she be able to compete with a South African? So I think it’s really, I don’t see it really helping that much, the criterion referencing, because they have to really compete with the outside world and if internationally things are not of international standards then really we have to go back to the norm].

*In a way, you are saying criterion referenced assessment will not make our students to be competitive?*
That is how I see it.

Yes, *nna* (me), [I will say that it is a good move; looking at the fact that criterion testing is sort of a true reflection of what a person or student knows. Take for example a student who is doing Design and Technology. Using norm referencing, eh at the end the practical mark and theory mark is combined together to see, a-a, if we compare the student with others this is his or her grade. But the criterion one will even go further to say this student is good in practical, this student is good in theory, and this student is very good in this particular skill, which I think is an advantage if like outside school when you look for jobs is being considered, that will be an advantage. We will be knowing *gore* (that) e-e, which kind of people we are employing, what are they good at, specifically].

[Criterion referencing gives students of different abilities a fair judgment, in that it looks at children’s accomplishments. This other one], [norm referenced testing is good if we want to, there are limited places and we want to promote students maybe to another class. If we use it well, that is the only way to select students for promotion. That is the only good thing about norm referencing].

Mmm, *gakiri* (isn’t it) with criterion referenced assessment in order to move from one level to another you must have satisfied certain conditions. Let us say must reach 50%, failing which means therefore you cannot pass. In that case it does not depend on the number of people who get more than 50%, but on whether you get more. [So what I am trying to say is it seems I am lost right now, because here we are having lost to what CRT is.

CRT is a true reflection.

CRT gives fair judgement.

NRT good for selection purposes.
somebody who is good in Design and Technology theory not
good in Design and Technology practical, but at the end of the
day that particular student somehow I understand get
recognition.  *Kera gore*(I mean that) I am quite lost, *kage kone
kothalagonya gore* criterion referenced assessment *re elibele e
ntse jang* (I mean I don’t understand how we look at criterion
referenced assessment).  Are we looking at it from junior
secondary school to senior secondary school, from senior
secondary school to somewhere or what are we really looking
at in that particular question?]

The way I understand it, [norm referenced testing, eh, is
basically when you rank students maybe according to their
marks, their achievement.  I mean their performance].
[Criterion referenced testing is when, it’s like you are broad;
you look at e-e, various aspects, and not necessarily ranking
students according to how they have performed].

I think [criterion referenced believes in quality, rather than just
ranking.  *Gakiri* (isn’t it) if you are ranking maybe eh, a
student can sometimes maybe have a lower grade, but get a
higher rank than others.  You see that, but there is no quality
there.  But I think maybe criterion referenced assessment looks
at quality].

Which means already in criterion referenced there is still a cut-
off point, isn’t it?  There will still be a cut-off point, below this
point we are unable to do this.  You can only achieve above
this particular point, just like tertiary institutions that you can
move to the next level if you satisfy these conditions.  [Now, if
now it is applying in our schools right now, *nna* (me) the only

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<th>NRT ranks students.</th>
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<td>CRT is broad.</td>
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<td>CRT is about quality.</td>
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thing I see that will maybe help is that the number of students who move from one level to another, e.g., from junior secondary school to senior secondary school, it will be just fair, because currently it’s not fair. Somebody in this school when compared with his other group *kakwano* (here), might get a place *ku* (at) senior school, but somebody in the other area who performed far much better than this one, does not get a space there, cause is compared to that other group. But with criterion referenced then, with those particular cut-off points you just get forget about who got better, and then they are the ones who get spaces instead of what we are currently doing right now].

*There is also an argument that criterion referenced assessment is appropriate in that it caters for multiple intelligences. What are your views on that?*

That is very true Mr Mafa, like in terms of sports. . . [So you find that some students do very well in sports, not only sports, but when they are compared with others, is like they are nothing, they have done nothing, and well if we use that criterion referencing, we are going to identify their strong points, and well of cause they have weak points, but with criterion referencing, we are going to identify their strengths and we are going to work on that, and it is even very good for our economy].

It is a very good point because in that situation then we can know who our stars are, where. *Kana* (in fact) the problem we are having right now is that we don’t have these specialised courses to take the students to, at the end of the day, the
movement from junior secondary school to senior secondary school must be in terms of academic performance. It would be very good if we have got maybe certain things to take these students to, but currently I think it’s just the limitation of our system here that we do not have resources to exploit it on that line.

*As teachers, in your opinion are you comfortable with criterion referenced assessment?*

Just theory, but we [were not taught how to do it].

We did it theoretically.

Sometimes they say experience is the best teacher, so these things at college we have the notes, just theory, [but then I don’t think we have the experience expertise to implement criterion referenced assessment].

*To what extent are (a) pre-service and (b) in-service teachers trained for the teaching of mixed-ability classes?*

*Nna* (me) [I was not taught how to teach mixed-ability classes. I was told I should expect them, but was not taught how to deal with them. The only situation I dealt with was just maybe very good classes because we used our colleagues during peer teaching at university].

It is true.

Even, eh, [the teaching practice as it is, you know. The
lecturer goes there, and sits at the back of the class. He doesn’t know anything about the ability of the students. You are not even; you know you are after marks. You want only to get certain marks so that you can pass, so there is no way that you as a student-teacher you are going to point at a slow learner, *gore* (that) can you help us with this one. You cannot, because you want to pass, so the only people, even you know devise some plans to tell those who know to raise up their left hands, and those who do not know to raise their right hands (laughter from most group members). So you know that so and so; the left-handers know the answer, so you point at them]. [So is the way the educational system is, even the assessment of student teachers, we don’t cater for those].

*Okay, what of in-service workshops?*

[Sometimes we organise workshops on mixed-ability teaching, when the resource person comes, he will make it theoretical as well, and then you think you have benefited from the workshop, but when you go to class, it’s not going to work. You find that you are just blank again you can’t implement it properly].

*Then is it your feeling as a group that in-service and pre-service are not doing enough to help teachers handle mixed-ability classes?*

Yes. I think this is the general feeling of most teachers even those not in this discussion. (some group members nod their heads in approval).
What of your instructional supervisors, senior teachers, heads of departments, deputy head and school head, are they offering any guidance?

(laughter from group members). A-a; they are just like us.

Gakiri (isn’t it) they are just from same colleges as us.

Is there anything else you would like to add regarding any aspect of mixed-ability classes?

[The education system does not cater for mixed-abilities], [for it to change we have to change the way we are taught at colleges. Those people, the lecturers have to come to real life situations, go to class and even assess you looking at students, and you know, and try and point at the slow learners, and everyone should participate, otherwise we are going through the same system, and it’s just a circle].

I don’t know whether it is important or not, though I am concentrating on Agriculture, [the other thing that is lack of time]. With some of us teaching core subjects like Agriculture, the other thing that makes us to have some problems in catering for these eh, mixed-ability classes [is the long syllabus], [because in most times we rush to finish]. So if you are rushing like that, what it means is that the [low achievers will be left behind].

[The number of students in a class is too much. So you find that most students who are there are low achievers in most classes, and they are too many].

| education system does not cater for mixed abilities. |
| change pre-service training. |
| lack of time. |
| length of syllabus. |
| rushing. |
| low achievers left behind. |
| teacher-pupil ratio. |
Rona (us) we have a problem in Science, because like the letter I was talking about on examinations. They were just critical that teachers do not teach their students process skills, that is using their own hands, how to manipulate certain skills. Now [if you take a big class], when its mixed-ability and [time like somebody mentioned], it’s almost impossible to achieve that mission.

[Okay, nowadays it’s like those with learning disabilities are included in normal schools], [so there is lack of facilities you can use to cater for those kids who have got learning disabilities, so I don’t think that inclusion is really working effectively because they are still lack of facilities in the normal schools] and [teachers do not have the skills].

[I think it will be best to have different schools to cater for different abilities, because if you just when they are from standard 7 they all come here at the end it’s not proper, because when they come here we are doing our best, but we do not know how to handle them. Maybe if they can have schools for those who cannot read and write, slow learners can use their hands somewhere for different skills].

[It’s really a problem, especially if you look at a child who doesn’t know how to write his name, *tota* (really), this automatic progression from primary is a waste of time for such a kid, because even the manpower, we are not trained to teach a child how to write, we don’t know, those things we thought they were for primary school teachers, so this automatic progression you see a child who doesn’t know how to write his...]}
name], [you don’t know how to help] him and [you end up ignoring that child].

_Ladies and gentlemen, thank you for your time. One of these days I will come around and observe how they are differentiating in Maths, group work in Social Studies and lecture and demonstration in Science. As you move out, go through the office next door picking a soft drink each, and a packet of biscuits per pair. Once again, thank you for according me this interview (clapping of hands and laughter). In your opinion, what are the advantages of mixed-ability classes?_
Transcript for focus group 3

**KEY:**

Italics: Interviewer

After each response, a line is skipped

( ) Denotes translation into English from Setswana, [ ] Coding range

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<td>In your opinion, what are the advantages of mixed-ability classes?</td>
<td>peer teaching.</td>
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<td>I think mixed-ability classes are advantageous in the sense that [kids can help one another because they are operating at different levels. The higher level can help the lower, just like that].</td>
<td>peer teaching.</td>
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<td>Well I tend to agree with her because the idea is, you see when you, [those that are higher-fliers or those with higher ability or higher IQ, they will also assist, you know in like discussions, a-a, what ever activities they are involved in]. They are likely to kind of you know, I don’t know how best to put it across, [motivate and help the low performers].</td>
<td>peer teaching.</td>
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<td>Emm, in addition to that, I think mixed-ability grouping as compared to umm, streamed classes, [help also to avoid nametags being attached to the classes. Umm if in the school they know this is a low class, e-e, a class of low performers, in most cases you find that certain tags, nametags are attached to those kids and when those nametags are attached to those kids, that may affect them psychologically], in that way it [affects their performance ultimately and they will convince themselves that they are self-fulfilling prophecy.</td>
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unable, and or, well they accept their lot like that].

[And, and to add onto that one, the facilitator or teacher, or whatever you call, if you approach a class having a label, as he has just mentioned it is difficult to help them achieve more because no one expects anything from them], [and they are also not looking forward to anything from themselves], [so even a teacher who will be taking such a class will not teach properly], so we prefer the mixed-ability one, because of such reasons.

Emm, and the other thing for this mixed-ability, I think there is an advantage there, [the teacher is forced to vary his methods or approach of delivering instruction], and it, it, [it makes a teacher do away with monotony, you don’t get bored of talking to the same level of students]. So the instruction will vary because of the classes for mixed-ability.

[Umm, again it encourages all the pupils because of that one ya competition and the pupils will compete with each other, even if they know that I can’t make it, they will try to make sure that at least this time, I must make sure that I beat this one, competition wise]. And again, [it will motivate the teacher, because the teacher will be motivated in the sense that, if you are going to teach different pupils, with different levels, you know you will prepare your best, and then it keeps one working because if the ones who are fast to receive the instruction, if they finish you can give them some more work], [and those ones, who are slow, they will make sure that they double up their pace so that...]

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teacher expectations.
self-fulfilling prophecy.
low quality teaching.
vary teaching methods.
brakes monotony.
students compete.
motivates the teachers.
they can do what others are doing, so that they can be recognised in the class].

Nna (me) according to me, I think [it’s a bit of a challenge to the teacher. Sometimes it is very good to work on a challenging environment. Kera (I mean) you work with people of different abilities. On a later stage you know how to deal with people who cannot think according to your liking, according to your expectations, and as time goes on, you know how to deal with them. I mean somebody who cannot, if somebody cannot write or even make, try to coordinate the work, as time goes on, you will know how to help that kind of a person, learning from the other people. So I think to me, it’s a bit of a challenge, mixed-ability, and as a result the teachers learn a lot from the students].

You become the master of everything.

When you, umm, [she is talking of professional challenge, you find that when a teacher is faced with a mixed-ability class, you know, umm, it is a challenge like she is saying], and of course e-e, he will adjust himself to be able to deal with pupils of different ability levels, and of course, that also, umm, [that also brings about professional satisfaction], when at the end of it all you have a low ability child and at the end of the day, for instance you realise that you have been successful to upgrade that child to the level of almost the one that was a high-flier, and well, [it facilitates a teacher to develop professionally in a holistic manner or holistic way].
Yes, I will say another point again in mixed-ability classes is that umm, I don’t know whether I will put it properly, but you will have just to take it. [In a normal grouping, in a bus, staff room or whatever, in any normal gathering, people are of different abilities. So by teaching mixed-ability classes you tend umm, to accept, and treat people as people not the dull one, the good one. You tend to bring in more of hidden curriculum issues, and say, ‘No, no, no, don’t laugh to this one if he gives a wrong answer, you have got to accept that, that is the answer he/she had in mind’. In such ways you bring out the different aspects of each individual].

*If I get you well are you saying that mixed-ability classes reflect the general society set-up?*

Ya-a.

Actually, I think it’s natural grouping versus an artificial grouping where you have intelligent ones, dull ones and what have you. [Mixed-ability grouping is just natural. Society is made up of people of various, whether it’s abilities, various characteristics, and these differences are reflected in a mixed-ability class].

E-e, still looking at that, I think (laughter) mixed-ability, e-e, mixed-ability setting it also brings in, e-e, it’s almost the same like what other colleagues have said that [the differences, the uniqueness, that as people we are different, you have to appreciate that there are some who are gifted, breeds tolerance.]*
and some who are slow learners, and some you know are average, and we all see that in a mixed-ability setting, that it’s norm, it’s normal].

I was just going to say [as a teacher you will as well learn how to handle students of different thinking capacities, or such things, because if you are just used to that class of high-fliers and you don’t have a chance of teaching those slow learners, by the time maybe you shift to the slow learners you will not know how to handle them. But if you are teaching a mixed-ability class, at least you know how to help students of different levels].

*Is there anything else that you would like to add on advantages of mixed-ability classes?*

Umm, I think we have done justice to the question, just a little bit. My life style reflect my training, and the people I handle. Then if I am in a mixed-ability class, I tend to suit well with the rest of society and if I handle a different group, I tend also to focus on that, and find myself a misfit of some sort.

*In your opinion what are the disadvantages or problems of mixed-ability classes?*

It is [difficult to monitor work] in a [set period of time], with a [large grouping]. Be, a larger group of learners when [you tend to be objective focused]. It’s not a *kgotla* (tribal court) situation where you go bla, bla-a for hours. It’s something that is [controlled for say 40 minutes], you professional development.

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<th>difficult, time factor.</th>
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<td>syllabus coverage.</td>
<td>time factor.</td>
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have to meet 3, 4 objectives. To me it becomes a disadvantage, [when the participants are more than what I am capable of handling].

Still adding on that, other difficulties apart from what you have just said is that e-e, [it becomes difficult in terms e-e, work input, the work that is to be prepared, at different levels, and. . . all what you have to do to that work that you have prepared, because normally as a teacher you have to give work to the students and then after that, after teaching to see to it that you look at your objectives to see if they are achieved]. [And if you are to go to the high-fliers, go to the average and low learners that will take time]. [And. . . here in Botswana we are looking at the syllabus, the syllabus, it takes that by this time you should be able to have completed the contents of the syllabus] so, it really, it demands, psychologically and as well as. . .

I think the other disadvantage is that [the high-fliers are sometimes disadvantaged somehow because you would not go at, at a pace you could have gone with if they were alone. Your time and energy is taken by that low achiever’s group. So in a way they are disadvantaged. You are dividing your attention. They are not benefiting much, since you are not giving full attention to them].

Still I would like to elaborate on the [time management aspect of it], it can be in two ways, [either the high-fliers may suffer, or the low performers may suffer. Because what is going to happen is a teacher in some cases may get impatient with slow learners, and just kind of forget about teacher-pupil ratio.

demands a lot of preparation.

time factor.

syllabus coverage.

different abilities are not catered for.

time factor.

different abilities are not catered for.
them and concentrate on the high-fliers. Or alternatively, more time will be lost as well for high-fliers while the teacher is concentrating on slow learners, to try and you know kind of raise up their standard or their performance to reach the level of the high-fliers]. So I think it’s generally about, your time management and emm, well it creates, [certain teachers may be impatient in handling slow learners]. [They may not be able to operate them at their own pace].

At times e-e, low achievers could be disadvantaged, amm, like for example you ask them to get into groups, [the higher achievers wouldn’t like to be with low achievers, they look down upon them. Like for example this morning I divided students into groups and when it was time for presenting I found out that they are certain groups who did totally nothing. But then when I find out what is the problem, I find that slow learners were in the same group and higher achievers decided to be in their own group, separate groups. When I asked, ‘How come you didn’t mix’? The higher achievers said these people are boring. They never comment, it totally discourages them]. [They feel nothing, and they feel very worthless]. So maybe if at times, mixed-ability, there is a really disadvantage to the slow learners.

Sometimes I personally find myself faced with a difficult of where to draw the line because [the objectives, they are different shapes and sizes, they are meant for everybody in the class and they are just same concepts, some of them carry concepts which I know whatever I do to these low

- teachers impatient
- teachers fail to differentiate.
- high achievers resent low achievers.
- low self-esteem.
- education system does not cater for mixed-abilities.
achievers, this person will not be able to get this concept]. So I find myself not sure what to do because the, [the, teaching is exam-based. The curriculum is also exam-based]. The second disadvantage is that sometimes I find [that the class is really the other end of lower achievers, where kids show physiological disorders, hearing problems, sight problems, stammering and it requires the teacher, now to have a little bit of knowledge on what is going on in the mind of the individual child], [and I find myself not capable to sometimes incorporate the learners].

(laughter) Still closely related to that one [there is the aspect of class sizes as well], I think it is also partly [linked to time management]. [You know the size of the classes that we have perhaps may not easily permit the teacher to give that individualized type of attention to specific individuals], and of cause implying in that case that you know, that you know [slow learners or slow children or whatever you call them are bound to be left aside], because like she said our [curriculum is exam-based], wabona (you see)? [You want to rescue the syllabus, to make sure that you complete the syllabus], [meanwhile they are slow learners that need to be helped out, demanding more attention] and meanwhile at the same time [the size of the class] may not easily permit you to really give that adequate attention to the individuals, at the same time keeping pace with the syllabus so that by the end of the year at least you know, you have covered adequate area of the syllabus, which will see them through the exams. So that brings about problems.
**By the size of the class, are you referring to teacher-pupil ratio?**

Yes.

Maybe to add onto that, I don’t know, our system here in Botswana, [the education system whereby those who obtain Es at standard 7 come into form 1. I think that can also be a problem because if you are having somebody who got an E, who doesn’t know how to write his name or something like that then you mix that person with somebody like the higher achiever]. [Maybe you will tend to take more time to help that one to even start to write his/her name and all those things, then it might go back to the time factor that you would be delayed trying to help those slow learners, starting the writing of the name and all those things it will take time to help that person cover up].

[So whilst you are still trying to help the slow learners, the, the higher achievers maybe sometimes if you have given them some work, and you are still struggling with the low achievers, the higher achievers will finish up maybe before time, and then they will turn to something else. Now the rest of the time you, will be wasted on trying to calm them down].

I have a problem with supervision because during the course of the year, [the system doesn’t deal with such things like can you do mixed-ability teaching, at the end of the year it changes, somersaulting to say the results don’t depict that you have been teaching these kids for a whole automatic progression.

| time factor. | difficult to individualise. |
| education system does not cater for mixed-abilities. |
year, and in that case it means the following year I tend to ignore what was said during the course of the year... and try to serve myself from the slaughter at the end of the year].

*If I get you well, your teaching is examination driven?*

[Ya-a, whether we like it or not because at the end of the year we are judged on the performance of the children in the exams, isn’t it?] (laughter from members of group).

How did they perform?

[Theoretical you can say that the teaching is meant to develop the child holistically, but the bosses want results at the end of the day].

*Okay, some people say that English language poses problems in subjects that are taught in English. What is your opinion on this?*

I do want a clarification on that one. A problem to whom? To whoever is teaching in English language, the communication from the learner to the teacher? English is a problem to whom and how?

Are you suggesting the inability to express themselves in English or what, or to comprehend whatever they are supposed to be reading or whatever it is because of linguistical problems?
To me, I agree that [English is a problem to both teachers] and students. It’s a problem to teachers because if you try to communicate something to students you find that they couldn’t get what you are saying, so you remain puzzled as to whether students are with you or not. So to me it’s a problem because my aim is to try to convey a message which I taught]. I believe students should be able to respond as expected. [Now sometimes students, you may give them some work based on a text, and you may find that students are not able to satisfy the, the, what the question requires them to do, simply because of the language they use in the text is English, and some of the words they are, they don’t know the meaning, they can’t deduct conclusions from a text. Therefore to them English is a problem].

I am actually not clear about how English becomes a problem.

*Let me just clarify, at times you hear teachers teaching and explaining concepts in vernacular language. Will they be doing this to help students understand or will it be because of the teachers’ limitations in English?*

Right, I think it can be both. [At times, sometimes you find that a teacher fails to put across a concept in English and has to resort to vernacular to probably clarify it to the children.] [And sometimes, at times it could be as well as a result of e-e, children failing to comprehend in English and maybe the teacher resorts to the use of vernacular, to simplify the concepts so that the students can probably
comprehend. That is how I view it myself. It only becomes a danger perhaps if one over does it or relies on vernacular, because those kids don’t write the exam in vernacular.]

[E-e, statistics will help me here, that if English is a second language, to anybody it becomes a problem, to anybody, and it’s our second language and these it’s also their second language. I am also still learning my English and they are also learning their English.] Where there is another language involved, like this, what do you call this, Scientific language? Instead of struggling to tell kids that I mean the navel, I want to tell them that ‘Kera morobi’ (I mean navel). You see what I mean? And it becomes automatic, they jump and say ‘Ye-e, so this thing you call it navel’? [Using vernacular is a shortcut to three or four English sentences (laughter).]

[Yona hela (it is) it’s a problem wabona (you see)? Like they have said, sometimes as a teacher you won’t know what the thing is in English, but you may be forced to tell the pupils gore (that) thing like this, is this in Setswana.]

And they may help you with the English word of that thing.

[In most cases these students are a problem. Nna (me) according to me most of the time I speak Setswana because they force me to. E-e, I mean if you mention something and they are just looking at you like that, even if you know that this is the simplest English ever, they will just look at you like that, and then you will be forced, you will be]
angry maybe to the extent of talking to them in Setswana or you end up explaining that in Setswana. I think the main part of the problem is on the part of the kids, because apart from English being their second language, the interest is also low. Because like for example as English teachers in this school, I don’t know in other schools, we have told them that it’s a requirement that in an English lesson they speak English from the first minute up to the last minute but they totally refused, I can’t even single out a single class here which can, which uses English. Like even if one wants to go to the toilet, it’s very very different from primary school kids, they will say, ‘Kebatla koya toilethini.’ Instead of saying, ‘May I please go to the toilet’. Especially when they grow up, when they are in form one they really try. They really seem to, maybe if the lesson is 80 minutes, 40 minutes of the time they speak English. But when they grow up, they totally refuse to speak English in classes, especially the form threes. My classes never speak English.

What are likely to be the reasons for the change from speaking English in form 1 and as they move to higher forms they resent the language?

I don’t know. I am still researching. (laughter from group).

Perhaps I just want to find out whether we are not being really, I think there is an element of bias, because when you are saying its ‘Simple’. Then the question one may ask is ‘Simple to who’? And how simple is, e-e, English is? Emm, e-e, learning of a foreign language is a process,
it is not an event. And you will find out that even people who have gone through various institutions of learning, you will see the situations where we twist our grammar as well. It only serves to indicate that you know, e-e, learning a second language is not really very easy. I am sure the reason why you are citing a situation whereby they tend to resort to vernacular as they grow up, you know when they, when they are young, they don’t easily get shy. [I am sure some of these attitudes we reinforce ourselves, as their supervisors. When a child e-e, makes a mistake, some of us instead of correcting them, we ridicule them or rebuke them], and they are so sensitive to the extent that if we do not arrest it in class, it contributes to that development whereby you find that a-a, when they are participating in class, if they say something wrong in English, the general tendency of the class is to laugh at the individual, and if we don’t discourage that, this is why sometimes they resort to the use of e-e, vernacular, or [non-participation] at all in class. Because they will tell themselves that, ‘If I say something wrong e-e, or say this thing wrongly in English, I know so and so will laugh at me, the whole class will laugh at me, so I would rather explain in vernacular’. So I think that we have to discourage the peers from you know, laughing or ridiculing those that wrongly explain themselves in English.

Yes, and the other thing which I can say affects their learning of English is the, any requirement requires [reinforcement,] and if the [culture of the school is not okay]. . . you cannot expect the students to communicate in English, if there is no reinforcement, they go back to their, teacher attitudes.

non participation.

reinforcement.

culture of the school.
because to them, some of them is their fourth language. They are Ndebele, Kalanga and Setswana and then English. So there is serious reinforcement required to come up with English speaking.

*Having the advantages and disadvantages of mixed-ability classes in mind, given a chance would you rather teach streamed classes or mixed-ability classes?*

(laughter) [I would be happy with streamed classes, provided I am given the higher fliers (laughter from members). I mean if you are to, I am to be given the low performers, then I may not be happy] (laughter from members).

Even me, [I would prefer teaching streamed classes, if I am given higher achievers, because even as you have already talked about English problem, even in my explaining, I won’t be afraid of mentioning some words, though I would not go onto higher terms but, I will be confident in talking in English ](laughter).

*Does it therefore mean that if you were not given top streams you would rather teach mixed-ability classes?*

Certainly yes, [when you are given a lower class, the problem is, I tell you, you, some of them hardly, would hardly be able to do anything, even coping notes, explaining, comprehension, nothing virtually. It’s like a-a, it’s impossible. The question is where do you put the low performers? We talk of streaming and we say we are prefer streamed high ability classes.]

[prefer streamed high ability classes.]

[prefer streamed high ability classes.]
taking the higher performers, where do you put the low performers?]

In someone’s class.

(laughter from members of group) Whose? That is the question.

_Nnna (me) _[I will be happy with mixed-ability provided the number of students is reduced. Mostly in junior secondary schools here in Botswana we have so many kids in our classes, like for example, we have a class having 47 kids, and it’s a mixed-ability class. You are expected to produce whatever 90% or something. If then that 47 can be reduced to something like 20 or 30, I will be comfortable with mixed-ability classes.]

The ratio of higher achievers, to average, to low achievers, we are having right now, the classes we are having right now I don’t know whether they are mixed-ability yes, but 5 good learners, to 20 average learners, to 30 whatever, low achievers. The ratio will work very well in a mixed-ability class if the ratio is 1:1:1.

_How would you describe the nature of the present classes?_

Mmm I think they are more of the lower achievers. Mind you the average group normally picks a bit, 2, 3, 4 go and join the higher achievers, the rest of the average in any paper they will fall down to low achievers. That is the nature of the classes we are having.
She is right, our classes are of more low achievers than high-fliers.

*What would you recommend regarding the teaching of mixed-ability classes?*

(laughter) We are [just struggling] (laughter from members of the group).

I just go to class and talk (more laughter).

Like we are saying that, some of us are saying e-e, the problems that we are encountering in mixed-ability classes, e-e, we are, [we are meeting people who have different problems that needs maybe e-e-e, a doctor or a nurse to attend to.] [Now as a teacher, I am not in a position to solve those problems. Therefore it means that amm, maybe there is something that a teacher lacks, there should be a line between a teacher and a nurse. E-e, that a teacher should be able to know some of the maybe, say for example first aid, we cannot carry out a first aid that is maybe recognised by the ministry, that we are qualified in, emm. Or somebody who has a problem of stammering, what do we know, what can we do to help as compared to doctors who can suggest that maybe, that student should do that, that, so that stays away.] [So in this teacher education there must be some improvement.] and again the ratio of streaming. When, when whoever is doing the selection of students, I think the ratio should be controlled somehow, so that we don’t just get more of the slow.
learners than the high-fliers in a class. That makes things difficult, more difficult.

Okay, but what would you recommend regarding the teaching of mixed-ability classes?

[What we do, we try to vary the teaching methods, so that we discuss in case you are introducing a topic, you discuss, then you later on you give them to do in groups. After groups obviously groups have to present sort of, maybe discussion within the class. Then later on maybe you can give them some guided discovery, still on the topic to go and look for some information on the line of what you will be doing during the lesson, so that maybe more of the information can be stored in the long-term memory.]

[By allowing students to discuss, we are trying to give opportunities to all students, so that in a group, each one of them could at least say something, say his opinion. In that way we are, its one of the strategies that we are using to cater for all abilities.]

I will say to me teaching a mixed-ability class, [the method is that bringing the sort of thing that they call interactive learning. In interactive learning, you will be sensitive to people who learn by doing, by seeing, investigating, and whatever, so in most cases I do try to bring such learning because as individuals students have different learning styles.] [Then another method is that one of remedial teaching.] I don’t know who brought it, who was investigating it, whether it’s Brunner, kemang (who is it)?
(laughter). It’s a good method but it is not working in the meantime because [the teaching profession is coming up with so many small things to worry teachers; meetings 2, 3, afternoons, workshops the whole week during the course of the teaching and I see honestly at the end of it all, a school teaching term is no longer the 70 days they mean because of other activities that disturb the teachers.]

*If I get you well, are you saying that there are activities that divert your attention from teaching?*

Yes. Maybe I should give an example. [Things like sports. It’s like somebody is ignoring the fact that teachers trained to teach Agriculture, Mathematics, Science, not to offer sports, so some say you have got to have a good netball team, but I don’t have that in my certificate.]

[E-e, I think the peer approach where you organise them into groups, maybe to some extent assist. Because in any case some of these slow learners learn better from their own peers, than from the teacher. The teacher sometimes talks above their level, and they can hardly comprehend. So when they interact with their own peers, they tend to benefit.] [At the same time, perhaps you, there is that aspect of extension work as well, where you would give you know some challenging work and perhaps, increase volume of work to the fast learners.] [But again they say this one has got its limitations, because of pupil-teacher ratio.]

In English I try to [vary the methods] but I am never sure other tasks not teaching related.

other tasks not teaching related.

peer teaching.

extension work.

teacher-pupil ration.

vary teaching methods.
whether I am meeting all the expectations. I don’t want to lie.

I think they have said it all **waitisi** (you know); [variation of methods,] [remedial teaching.] [But maybe if, I don’t know, whether it’s the government or what could help us with these Ds coming from primary school to increase the problems that we face. You, certain people like we have said earlier on coming with a D, does not know how to write and all those things, maybe if the system could be revised such that all those Ds go back to standard 7], [and maybe the syllabus content to be, I don’t know reduced in a way to cater for slow learners so that they can also cope.]

[The other thing is you can do hands-on. You let them go and use their hands. Like in agriculture, if you can teach them about types of seedbeds, some slow learners won’t know what you are talking about, but when you get them out to the garden and show them, and let them make them, they will know, this one is a raised one, flat, and this one is sunken. So in that way you are communicating.]

I was looking at e-e, the, okay we said emm, there are students that will need specialist teachers. So the government should consider [training specialist teachers] for some of these pupils and possibly also consider [establishing specialist schools. Well I know there is this thinking that pupils including those with disabilities should be integrated in society. But you find that in some cases, its not very easy because some of these may need specialist rooms, specialist equipment, they will do best if on their

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own, emm, specialist institutions, not that we are segregating them and well kind of removing them from the whole society. But I think it will benefit them.]

I think they are neglecting it at primary level because if they can [identify it at an earlier stage maybe that can help, they now think of it when they are in form one. Then they start saying identify those students with disabilities, but if it can be at a lower level at primary school, I think that by the time when they reach an age ya (of) form 1, 2 and 3 they will be doing something else that will benefit them in the other schools.]

In addition to that, I have realised that in some countries they have a-a, a specialist unit within the ministry of education, the psychological services where they are specialist trained, you know kind of psychologists, [educational psychologists that is, who would move in schools.] They would administer their own instruments or aptitude tests to try to determine exactly the performances of the pupils and be able to isolate those with learning problems and find ways of you know, helping them. If they are to be recommended for [specialist institutions they are recommended that they go to specialist institutions. In that way it will also help.]

My contribution is that maybe the government should look at the testing, the way they are testing the kids in the primary level that is supportive system to us. So to just give them multiple choice it becomes difficult for me to immediately get in touch with them to see who is a high-

identifying children having special needs at primary level.

educational psychologists.

special education schools.
flier and who is, and then I am marked against the A, the symbol that the student brought from primary level, and I am not testing multiple choice. So I think the system must be supportive all the way.

*Keeping mixed-ability classes in mind, what is your opinion regarding a shift from norm-referenced to criterion-referenced assessment?*

[Clarify these terms] (laughter from group members).

*Criterion-referenced assessment measures students’ skills and competences against a set of criteria and grades, which indicate levels of performance rather than the relative position in a group, which is measured by norm-referenced assessment.*

I personally think that a-a, [CRT will be more objective] than the NRT, because in the first place you see, the, these kids are exposed to education in different institutions, providing different conditions, different circumstances and what-have-you, and so forth, and as such you find that it’s not like we literally provide the same conditions for these learners, and I think education is all about, education or exams is all about a child remembering what they have been taught. You don’t measure what has not been taught you measure what has been taught, isn’t it? [CRT type of a test it measures exactly what the children have been exposed to, and you will have a more accurate assessment of the child’s ability than under NRT.]

| teachers lack knowledge on assessment methods. | CRT more objective. |
| CRT gives accurate assessment. |
(laughter). [I wanted to say I prefer CRT, because in this case if they are set skills which pupils are supposed to be tested upon, one maybe able to know *gore* (that) this child knows this skill much better than the other one and then when it comes to recommending you maybe able to recommend looking at the skills.]

Ya-a, again adding on that, the [CRT I think is best for mixed-ability in the sense that since we are looking at the, the individual skills that students should have achieved and therefore we can bring in the issue of promoting students. If students are doing form one, they are not doing to the expectation, to the criteria that we want, I think, we may think of saying this student should not proceed to form two because he is not, he is not what, he, he does not satisfy the criteria that we are looking at.] I think that we will be [more fair to the student because it is of no use to just pass someone, just so that he goes with wasting time, at the end of five years now he has learnt nothing, cannot communicate well in English. He cannot, if he has been doing Agriculture, he cannot maybe make a good plot, if he has been doing Science, he cannot even make a simple circuit diagram.]

CRT, I think is the way to go because [we are of different backgrounds, and in subjects like Setswana and Moral Education, where the kids can express his/her immediate environment, becomes a problem if there is a set standard answer to cover everybody in Botswana. We are sort of a concoction of cultures, *smallanayana* (very small) tribes, so the NRT will not do because the answer comes from the
examiner, and we don’t know which part of the country the examiner comes from.]

[I think there is always a cultural bias in the NRT, where in some cases I think, we have got situations where children are tested on an essay, a comprehension that talks about flying, *bona* (they) have never flown. You are tested on, about life at the seaside. They have never been to a sea you know, so it’s like you are asking the children to visualise what exactly is being talked about and already you can tell that, you know this child is disadvantaged, yet in real terms you compare that with a child who has flown, already they have an advantage over the child who doesn’t, like most of these emm, these whites and rich black families, their children are brought up you know, they experience things like flying in planes, visiting the beaches and being at the seaside, etc. Landlocked Botswana, you ask the child about life at the sea or flying or whatever it is. Its not a very fair way of assessing kids.]

*If I get you well, you are saying that criterion-referenced assessment is appropriate where you have a mixed-ability class, because students have different backgrounds, is that what you are saying?*

Yes. [Each child has got own experiences, isn’t it? And because they have own experiences, they are tested on their own experiences.]

*Still on criterion-referenced assessment, as teachers what is your opinion on your ability to administer criterion-
referenced assessment?

[E-e, I think most of us will benefit maybe from a hands-on workshop on CRT. We are not well equipped.]

Umm, like he has said, [we will need a lot of guidance if it is to be properly done.]

To what extent are (a) pre-service and (b) in-service teachers trained for the teaching of mixed-ability classes?

The [pre-service training and in-service training to me it’s okay, it’s adequate], but they are ignoring factors that make it difficult, irregardless of how many workshops you attended, or how many lecturers taught you, [if the kids are 48 in a class, in mixed-ability classes, e-e, a component of it is being ignored, what makes it not work. The skills I have for which I don’t have a class, 48 is not a class] (laughter).

Okay, what are these factors being ignored?

[The number of kids,] [too many other things that come into the teaching profession taking away the teachers’ time.]

May you please provide some examples?

[Meetings, cluster activities, sporting, workshops during teaching time.] I think those are examples of such factors.
[And adding to that again, remember that those 48 students, you don’t only teach them, you should have time to review their work. And if there is a large number of, you cannot do it several times on a weekly basis, it becomes tiresome. Therefore, it is taking a lot of energy and that is what makes it difficult.]

*But are you satisfied with the pre-service training that you received?*

Yes, we were introduced to that mixed-ability and even the mixed-ability grouping and the, I remember attending a workshop that was organised by TT&D on mixed-ability in Selibe Pikwe. So I think the government is trying in a way to put this in place.

[I wouldn’t say the pre-service training is considered as adequate. I think it was just to serve as a basis. You can never, I don’t think you can get to a point where you can really say e-e, the level of training was really adequate. Things are changing and we discover, new theories come up, and so forth and it’s a process.]  [But I think one of the setbacks that has been there is the concept of universal education, which has been more driven by politicians than anything else. Because I think it’s like educational planners are responding more to you know, demands of politicians, whereby you find that every child is supposed to go to school, irrespective of whether they have mastered the basics that they require in order to proceed from primary school to secondary school. And the fact that, you know, politicians mean to please their constituencies, isn’t
it? And they would want to go and indicate to them that
we talked strongly in parliament and that every child
should go to school. It’s not backed up with say adequate
training and probably the provision of the necessary you
know, materials, infrastructure to facilitate, you know. I
think this is what actually led to ballooning of classes
resulting in teachers failing to handle the kids, not giving
adequate attention to individuals.]

Nna (me), [I think the in-service training should be done
more often, looks like it’s not done so often. If it can be
more of it when we are in the service, I don’t know, that is
my feeling. Like in my, let me cite an example, it might be
2 years back that he attended a workshop in mixed-ability
or something like that, and it maybe to a particular group.
But if it can be workshop after workshop maybe, if it’s
possible, then it can keep the whole thing going.]

Okay, but in your opinion was the pre-service training you
received adequate?

E-e, it was just a little bit of it. I don’t know, maybe if it
can be increased, but the little that we were given, I think it
is good for us, even though not adequate.

I think [pre-service was more of theory than practical.
Though we were, yes we went for teaching practice, but I
don’t think it was enough. We were doing theory more
than the practical.] [In-service, yes the government is
trying, but is not enough. Ever since I came into the field I
haven’t gone to not even a single workshop.]
How far back is that?

[I started in 1999, but I have never went for a workshop, which empowers me or whatever.]

Pre-service is more like a learner driver being taught how to drive at a driving school. After leaving the driving school, the actual driving takes place on the road (laughter from group members).

I feel [pre-service was just enough. We were given enough practice,] we have got, but then when you get to the field in most cases you fail [because of the resources. Kera (I mean) you have to teach poetry, songs and all the like, and when you come to a school, there is no radio, there is nothing that you can use for that, even an OHP, maybe it’s only one in the school and it’s broken. The TV is one. I mean we have the skills but, because of the resources, the materials there is no how we can put the skills into practice.]

To me it [pre-service was not adequate, because we need to practice, e-e, put theory into practice] so that you can really know what you are going to deliver to people out there, when you are doing your service. Mostly this thing ya (of) mixed-ability, what they concentrated more was on the teaching methods, e-e, so I don’t know whether there is much to be taught on mixed-ability apart from the methods, and [in-service mna (me) I have never been exposed to that one.] So I don’t know whether I am expected to handle
mixed-ability classes at the moment, because I have never practiced it. For me to practice, I need in-service.

I want to add something, there is this tendency that [in-service training teachers are sampled and somebody somewhere expects them to pass over the knowledge to other people, and research shows that as information moves from one person to another, it becomes distorted. So e-e, I would agree with colleagues when they say they have never been to, because we were just sampled. I have been in the field from 1992 and I have almost gone 4 or 5 times, those who have been here for 2 to 3 years, they haven’t been called to anything. It’s randomly done.]

We, we, a-a, I don’t want to say as teachers we know nothing about this. I think all teachers they know about mixed-ability. Maybe the name itself, maybe it’s new. But normally even at homes, we have those kids having problems. Even in class, some of us do practice mixed-ability teaching, we do look at the slow learners, maybe take few minutes, looking at your time, when you see I don’t have enough time, you just ignore that, you go onto the next group, but we do practice it. Maybe at a lower level, we tend to look at those slow learners and say: ‘What are you doing? Are you not supposed to be doing this’? And also the high-fliers, we mark their work and give more assignments to them. We do it but to a low level, I think. But I feel [pre-service isn’t enough, it is inadequate.]

| Some people argue that mixed-ability grouping provides all students with equal educational opportunities. What are | in-service inadequate. |
your opinions on this?

[Well I suppose theoretical on the surface it does, because perhaps kids are exposed to the same environment, same teacher, same facilities. But it has to be at the disadvantage of the groups. If I am a slow learner, and I am put in the mainstream of fast learners, or whatever it is and so forth. If we are mixed we will not learn at the same pace. And at the same time we may need different approaches that may not be provided. We may need different environment, I think I cited an example of ee, a situation I said, but removing a disabled individual from society putting them into an institution, you are kind of discriminating against the individuals. But there is no way you can avoid that. You need to make a ramp versus stairs, because that individual maybe using a wheelchair, isn’t it? So you can’t say by making a ramp for the individual to use a wheelchair to go up, whereas the able bodied person is using stairs you are discriminating. You are not discriminating, you are only providing facilities, which will make that disabled person access the environment.]

I will disagree with that one, and say that we as teachers, we want to avail opportunities and the learner to be aware that this is an opportunity. [If two thirds of the class is not aware that it’s an opportunity, then the opportunity is not availed to all, because the rest of them, most of them are not aware of what is happening in the class, you really have to dig deeper to make them understand the concept. But if you just do it today and forget, it’s not an opportunity. I may have used 2,3 methods, and the students still don’t get

no equal opportunities in mixed-ability classes.

no equal opportunities in mixed-ability classes.
it, I have to revisit it again tomorrow, next week and so on.]

[They might realise their opportunity in the right environment. If they are not put in the right environment, they won’t realise that opportunity. When you are mixed, when you mix someone who is fast with someone who is slow, the slow learners may not realise this opportunity, because the environment is not conducive, for them to realise the opportunity.]

*I was wondering whether exposing students to high quality instruction and students enjoying same facilities don’t amount to provision of equal opportunities?*

High quality?

High quality? A TV in a class, and they are five of them understanding that TV then it becomes an opportunity to the 5 only, and the rest are not getting what is happening. It’s like these radio lessons we had at primary, I didn’t know what was happening. So it’s an opportunity to who? To just those few in class.

Yet if they are put in their own environment, [say slow learners and they are provided with high quality instruction of their level, provided with necessary technology to aid the learning of their level of ability, thus high quality instruction.]

*I thought prior to this the general consensus was very few no equal opportunities in mixed-ability classes. Ability grouping offers equal opportunities.*
in this group are prepared to teach low streams.

Yes, [I think it was qualified that provided teacher-pupil ratio is looked at.] I think that is the bone of contention.  

*If I follow your argument properly, are you saying that mixed-ability grouping does not offer equal opportunities?*

Ya-a, they can be streamed and provided with the necessary attention, on their own.  

*Is there anything else that you would like to say concerning mixed-ability classes?*

Amm, [I think there should be a delink between students’ performance and teacher performance, you know. What I mean is e-e, supervisors must not judge a teacher’s performance by looking at the performance of students, especially where the teacher is teaching mixed-ability classes.]  

*Are you implying that if there is no delink teachers end up using teacher-centred teaching strategies like rote learning to get good results?*

Exactly, as long as such methods produce the desired results.  

Again as teachers, [we have a lot of other things like family commitments. Teachers might be having their own children who are slow learners, whom they have to help also after school.]
Teachers need to be recognised for the good work they are doing in mixed-ability classes. I think that such recognition is not there, even from their immediate supervisors.

*Ladies and gentlemen we have come to the end of our discussion. Thank you for according me this opportunity to discuss with you. Allow me some few minutes to serve you some drinks and snacks.* (Laughter and clapping of hands).
Appendix 4

Transcripts for follow-up interviews

**Teacher X** (Substituted the teacher’s name with letter X)

**KEY:** (translation from Setswana), [ ] Coding range

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<th>TRANSCRIBED TEXT</th>
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<td>What strategies are you presently using when teaching mixed-ability classes?</td>
<td>lecture method.</td>
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<td>There are a number of things one can do. For example, I know very well that [the lecture method is not a good method, but it currently is the main method being used], so that particular method now one can try to support it through [discussions, demonstrations and experiments] of course but we are afraid to do that because of the nature of what may happen. So we rely mostly on our experiments, [but group-work to be honest I still have doubts about it], because normally it doesn’t turn into effective instruments.</td>
<td>discussions, demonstrations, experiments.</td>
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<td><strong>Okay why do you have doubts about the effectiveness of the group-work method?</strong></td>
<td>doubts effectiveness of group work.</td>
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<td>[Perhaps maybe it doesn’t turn into effective method maybe because of poor planning or what, what. But what I have observed is that you start breaking them into groups, you move from one group, that one stops doing anything, you go to the next group, they stop doing something, and you realise in a group there will be maybe only one person or two who</td>
<td>problems with group work.</td>
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would be doing the actual thing, the others are not doing anything. You ask them to present, there will be same one presenting, time and again, time and again, so that’s why group-work although very important it’s not very effective for me.]

*So in a way you have stopped using group-work as a strategy of teaching?*

I haven’t stopped it, but I use it sparingly.

*Therefore, how are you solving the problems that you have been talking about?*

[E-e, I try to encourage those students, but to be honest with you I have not yet started deliberately planning for it. What I try to do sometimes is I will make sure gore (that) the people who I know cannot do anything, because I know my students, those I know they can’t do anything I normally try to put them in positions of responsibility in that group, maybe somebody will be the secretary, and the other one presenting, I try to do that to encourage others to participate.]

*Okay, do you always use mixed-ability grouping or you sometimes use ability grouping, in those mixed-ability classes?*

Honestly, [when I group them I don’t care who is who. It would be that table, that table, that table. But I know very well gore (that) in most classes, there will be a table somewhere with slow learners, so that is the kind of table I assigning each group member a task.

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will not allow to be alone there. But in most cases I just take table by table, no matter who is there, they are students all of them.]

You have said that the lecture method is not very effective, what could be reasons why you are still using it as the main teaching strategy?

As a matter of fact, these classes of today [we are not very much equipped to teach them,] and [considering their sizes again,] and that we have to [complete the syllabus,] you are forced in most cases to employ this method.

If I get you well, are you saying that you use the lecture method so that you can cover the syllabus and because of class sizes?

Ya-a, [completing the syllabus] is very very important, and [the class size again comes into question there. Because if it was a small number of students, it could be far much better, but 40 students, you spend a lot of time.]

Okay, under normal circumstances what other teaching strategies do you think could be used in mixed-ability classes?

As for my subject Science, normally considering everything was occur, I will prefer to be doing experiments all the time, and discussing results there after, and then maybe going for group-work assuming that I am able to plan and manage it very well. I think group work, well managed, well planned, and experiments well managed, well planned are very very
good methods if we are teaching according to our syllabus because they say that these students must be able to work with their hands, teaching must be student-oriented, but currently I find myself failing to achieve that objective.

*Okay, during instruction how are you making use of students’ individual differences in order to make your teaching effective?*

Normally I don’t have any plan to engage students in my lesson, I mean I don’t have a deliberate plan, [but what you will realize is that you know your students in class, sometimes those students I never use them anywhere, I just allow them to come only at a later stage to try and explain something which maybe I don’t know, or I will just, to give you an example, I will say *gore (that)* ‘Who can explain what I have said in his or her own words?’ If I realize that there is a problem with communication somewhere, and I feel what I am saying is, something to be understood by anybody, I will just try to use those kind of students to try and explain to the whole class, what I will have just said, but like I said, I don’t have any plan *gore* (that) I use them in this way.]

*Do you foresee a situation in your teaching where by a low achiever can contribute to the effectiveness of the lesson using his knowledge of the world?*

Slow learner, using her/his background to improve teaching? Maybe the question is not clear to me.
Okay, I am referring to the notion of multiple intelligences, perhaps a student is not gifted academically but good in manipulative skills, can a teacher use such talent to make the teaching effective?

Ehe, I will just give you an example, [currently I find myself in my 3C class, most of these experiments or demonstrations, if I am working with chemicals which I know that there are not that difficult, there are usually done by this boy Wamorena, but he is not the best in my class, because I like his spirit.]

Do you often create more of such opportunities where those who are not academically gifted to contribute positively to the teaching - learning process?

I don’t do that kind of things due to the problems I mentioned earlier on.

What differences are there between teaching strategies for mixed-ability classes and those ones for streamed classes?

[Obviously the methods cannot be the same, because if you have got a streamed class, you maybe having very good students, once you say do this, do this in groups, automatically they are going to do what you want. Perhaps it is a class with low able students, then you know . . . is not to push these students forward, you can try to help them achieve something, even though you don’t finish the syllabus. So the methods for streamed classes are likely to be very very differently from mixed-ability teaching methods. In mixed-
ability teaching *tota* (really) there is a big big problem you have got to cater for that particular one and that particular one, at the same time. So really methods can’t be the same.]

*What specific organizational and teaching skills do you think that you need in order to teach mixed-ability classes effectively?*

[When I was training for example, I was training with a syllabus that I was supposed to teach, I had to assume that I would teach students who would understand. I never, or I was never given a situation whereby we have to assume that I have any students who can be having a problem. But you get into the classroom, you realise that you cannot teach the way you have wanted to, because there are problems there and there. If I recall very well during my training, we were just given just notes on mixed-ability teaching, but we were never really given anything on how to handle such classes, we were told *gore* (that) students are not the same, others may not be good in this, but good in that, you should try to look out for that thing, but how to deal with them after identifying them, we are not very much aware.]

*Okay, therefore basing on your experience of teaching mixed-ability classes, what organisational and teaching skills do you think you need in order to teach mixed-ability classes effectively?*

Ehe, what I really want and what I think is a need to me, maybe imagine I have got a class of children, and I realise that these children are down, you know what I mean? They are
down *wabona* (you see)? To be honest with you, [I am not very good at trying to motivate them to pick up to that particular level, where I want them to be. So if I could have motivational skills, I would be a far much better teacher than I am today.]

*Okay, what else?*

I must have (silence), [like I said before group-work needs skills, but I don’t know of somebody can be offered skills or trained to manage group-work. But if it was possible, it will be very very great if maybe I were to undergo a workshop where I was going to be dealing specifically maybe with experiments in my syllabus, how to manage and plan them very very well, and how to organize these students into group-work, because I know very well if I had learnt how to plan for these experiments in a good manner, then I will be able to use these students in groups to discuss the results, that will be the very best.] [Also coming to questioning, that is one of the very very difficult things. Anywhere, it comes with experience, I am still trying to learn how to ask the right questions at the right times, because sometimes you think you are asking questions when actually you are asking questions which are not helpful, and that’s a very difficult skill, and I feel one can not go for training to learn how to question. It is something that develops as you become aware of the technicalities of your area.]

*Okay, what of the preparation and presentation of differentiated work, do you think that you have these skills?*
To be honest, I am not okay, and to be honest with you *gape* (once again), [this thing remedial work, I know what it means in my mind, but planning for it I can’t, because I really don’t, because I believe if I were to do it, what I am doing is not remedial work, its repeating what I said, so I have got a problem with this remedial work.]

*Do you have anything else to say concerning the teaching of mixed-ability classes?*

Not much, only to say *gore* (that) mixed-ability teaching is something we are going to stay with whether we like it or not. However, we must support it because it is good. The only thing is that [we teachers who are on the field, and even the ones who are still own coming, we are all not prepared to handle these kind of classes.] [Only if something could be done to help us in these classes then I believe *gore* (that) our job could be much easier, we can have some fun in it] (laughter).

*In a way you are advocating for a change in pre-service and in-service teachers’ training?*

It must happen like that, [it must be a change. Because *tota* (really) what like I said, we trained to teach, I trained to teach Biology, and I was training specifically with a Pure Science syllabus, e-e, which means *tota* (really) I was focusing on, actually I was hoping for students who will be very good in the secondary school, not forgetting *gore* (that) rules may not work in your way. Currently I am teaching the junior certificate syllabus.]
Sir, thank you for affording me this opportunity to once again discuss with you about mixed-ability teaching. I may come back for some clarification, if there is need.
**Teacher Y** (Substituted the teacher’s name with letter Y)

**KEY:** (translation from Setswana), [  ] Coding range

<table>
<thead>
<tr>
<th>TRANSCRIBED TEXT</th>
<th>CODES</th>
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<tbody>
<tr>
<td>What teaching strategies are you presently using to teach your mixed-ability classes?</td>
<td>group work, lecture and discussion method.</td>
</tr>
<tr>
<td>Okay, at the moment I use [group discussions, lecture method, e-e demonstration method.] For the time being, those are the ones that I use mostly.</td>
<td>peer teaching.</td>
</tr>
<tr>
<td>Briefly explain how you are making use of these methods.</td>
<td>consider students’ learning styles.</td>
</tr>
<tr>
<td>[Okay, as for group work, e-e the group is made of students of different abilities, low achievers, middle achievers and high achievers. They work together, share ideas.] Demonstration; [some students they don’t grasp concepts. I mean if you demonstrate, you are catering for those students who are low achievers, and those who grasp concepts slowly.] E-e, then [the lecture method, I use it mostly when considering time.] You know, even the content, you break it in such a way that you cater for the different abilities of students when lecturing.</td>
<td>time factor.</td>
</tr>
<tr>
<td>How effective have you found these methods to be?</td>
<td>group work, demonstration effective.</td>
</tr>
<tr>
<td>Yes, e-e [group work is very effective, demonstration is also effective]. [Lecture method is not that effective.]</td>
<td>lecture method not effective.</td>
</tr>
<tr>
<td>How do you solve the problem whereby highfliers tend to dominate during group work?</td>
<td>monitoring.</td>
</tr>
<tr>
<td>E-e, [after giving students work, I monitor them.] Those</td>
<td></td>
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<td></td>
<td></td>
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</tbody>
</table>
highfliers if they want to dominate, I am able to control them. I even throw [questions to those who are low achievers to make sure that they participate.]

Apart from the teaching methods that you are presently using, what other teaching methods do you think could be used to teach mixed-ability classes?

Okay, a-a, e-e the method that I think could be fully utilized is the demonstration method. I think we are not using it all that effectively. [Another one is maybe field excursions, whereby students are given an assignment to do maybe they do experiments, and then give a report. I think that is a method that could be very very effective especially to slow learners.]

If I get you well, you said that demonstration is not very effective presently, what are the likely reasons for this?

[Okay, number one lack of equipment, that is the biggest problem that we are facing, that is teaching aids, and some other resources which we could use to demonstrate some complex concepts. So we are just improvising and it’s not that effective. For example, in Geography when we talk about instruments used to measure weather elements, we need to have them and we need to use them.]

During instruction, how are you making effective use of the children’s individual differences in order to make your teaching effective?

Well e-e, during the lessons, [use of the question and answer.]

Question and answer
and [we have questions that you rephrase so that low achievers will take, you make sure that they will understand them, throw them to them, and then they answer. There are questions that you feel the higher achievers will answer them, you make sure that you phrase them in such a way that they will understand and will answer, just like that.] You interchange, exchange, something like that.

Okay, as you know that students have different backgrounds, they come from different homes, they have different experiences. Do you think that these differences can be used by the teacher in order to make his/her teaching effective?

Alright, yes [I agree that the teacher should know the background of the students when he teaches them. For example, when students e-e, who are poor at home, that might have an effect on their education. Therefore, if the teacher knows that, even the examples that he gives, even the, some they don’t even have a chance to read at home, doing homework, they do not have resources. So the teacher can, if he knows that he can plan in such a way that he can cater for that type of students if he has the background. He knows that I have. . . .students and for me to help them, I need to do this and that, so that he caters for them.]

Okay, but how can you as a teacher use the students’ different backgrounds, knowledge and different experiences to make your teaching effective?

Yes, for example if we talk about tourism, the importance of tourism, [if a student has been exposed to an area where there
is a lot of tourism taking place, that student with that exposure, and maybe the father or the parents are involved in the business of tourism, that student could use that experience to enrich others.] That is very very important.

*Presently as a teacher are you making use of your students’ differences in order to make your teaching effective?*

[No, no, most of the time we just lecture, we give a lot of information to the students. It’s like we are not giving them the opportunity to say out what they know, to bring in the information that they have. Most of the time we are giving them information.]

*What are the reasons for just giving students information?*

Number 1, [when we consider the teaching load], number 2, when we consider the [time frame] that we need to [complete the syllabus as quick as possible because you never know, if we don’t finish the syllabus, some examination questions might be based on what you have not covered]. [So we have to quickly rush through the syllabus, to finish it.]

*What differences are there between teaching strategies used in mixed-ability classes and those ones used for teaching ability grouped classes?*

[I think there are differences. The strategies we use for mixed-ability teaching well they are time consuming and they need to be varied need to use a lot strategies to teach mixed-ability classes. Unlike if you are maybe teaching streamed teaching strategies for mixed-ability different from strategies for streamed classes.]

peer teaching.

lecture method.

workload.

time factor.

syllabus coverage.

rushing.

classes, the strategies, you can even use one strategy, because you know the calibre of students that you are, if they are high achievers, you know that you are catering for high achievers. But with mixed-ability classes, the strategies have to differ, and you need not use one strategy.

*If I get you well, you said that in mixed-ability classes strategies have to be varied since students have different abilities?*

[Exactly, and they have different learning styles.] So you need to [use some variety of strategies in order to cater for them.]

*During our focus group interview, the general feeling among the group members was that pre-service and in-service teachers' training are not adequately training teachers for mixed-ability classes. What organizational and teaching skills do you need in order to teach mixed-ability classes effectively?*

[Okay, e-e when teaching a mixed-ability class, you need skills such as how to actually break the content in one topic for example, in such a way that at the same time you cater for all these abilities of students sitting in that class, sitting for that lesson. I think that is, we need skills in doing that, breaking the lesson into different components so that we cater for all the students.]

*Do you mean differentiation?*
Exactly, skills in differentiation, I think it’s very very important. [Assessing the different abilities, I think we also need skills in doing that, because normally when we assess, it’s like we assess pupils of the same ability. We need skills to assess the lower achievers, the middle achievers and the highfliers.]

**What other skills do you think that you need apart from the two that you have mentioned?**

[Well we have the information on teaching methods but we need some kind of workshops to reinforce, or try to put into practice in workshop forum what we know or what we read, e-e to compensate the knowledge that we have.]

**Okay, is there anything else that you would like to add regarding the teaching of mixed-ability classes?**

[Well I can say that teaching mixed-ability classes needs somebody who is thoroughly trained to do that, and it needs somebody who is very very skilful in doing that. In addition, you need more time you need also patience as a teacher. Otherwise, I think the challenge is just okay, it’s a good experience to teach mixed-ability classes.]

*Sir, thank you for according me the opportunity to talk to you about the teaching of mixed-ability classes. I might come back for more clarification. Once again, thank you.*
Field notes

2C Science  Date: 13/10/03
[ ]: Coding range.

FILED NOTES

It is lesson 7, it’s midday and it is very hot. However up to 5 students have their track tops on, despite the heat. There is some noise in the corridor since students are still moving into classrooms, after the short break between lesson 6 and lesson 7. [The display boards that are in the classroom are empty serve for duty rosters and examination timetables.] One of the students goes to the teacher to tell him that he can’t find his book. [Teacher writes the day’s topic on the chalkboard ‘Temperature regulation’, proceeds to tell the class what the lesson is all about.] [After about five minutes of introductory remarks, the teacher asks a question.] [A boy responds, and the teacher repeats the answer.] [Teacher asks another question, low order question, [to which another student responds.] [Teacher does not praise students for correct answers.]

[Teacher tells the class that they should know the differences between cold and warm-blooded animals.] [Teacher says something in Setswana, goes on to ask the class the differences between warm and cold -blooded

CODES

empty display boards.
teacher writing.

lesson introduction.
student talk.
teacher questioning.
student talk.
lack of reinforcement.
teacher talk.
use of Setswana by teacher.
animals.] [Very few hands are raised; teacher gives
students turns to name examples of cold and warm-
blooded animals.] About a quarter of an hour gone since
the beginning of the lesson, [teacher keeps on asking
questions.] [Students are seen opening textbooks and
notebooks to look up the answers.]

[Teacher writes two terms on the chalkboard;
endorthemes and exothermes, them thermal and heat in
brackets.] Using thermal as a cue, [teacher asks students
what endorthemes and exothermes mean.] [Few
students give chorus answers,] teacher does not
discourage such type of responses, instead goes on to
expand and repeat the answers given. [The teacher asks
the students if they have any questions. No questions
from students.]

[Teacher explains that they will concentrate on
endorthemes, goes on to explain the importance of heat
in animals’ bodies.] [The teacher asks the class how
animals control heat loss.] [Flipping of pages is heard,
as students search for answers.] [One of the few
participating girls gives an answer.] The teacher
demands more answers. Each time a student gives a
correct answer, the teacher writes it on the chalkboard.
It’s about 20 minutes since the beginning of the lesson,
lesson is interrupted by a teacher from the next
classroom who is asking for a spare chair. When the
other teacher leaves, [the teacher still invites more
answers, uses some Setswana as pointers.] [About five
students out of a class of 40 are participating.] [One boy
limited student participation.

limited student participation.
teacher questioning.
reference to textbooks.
teacher writing.
teacher questioning.
chorus answers.
no questions from students.
teacher talk.
teacher questioning.
reference to textbooks.
limited participation.
teacher talk.
limited participation.
students out of a class of 40 are participating.] [One boy is seen paging through the dictionary, had been doing this for the past 10 minutes or so.] [Teacher continues to ask questions.] [some of them in Setswana and even explaining the answers in Setswana.]

[Almost 30 minutes gone since the beginning of the lesson, teacher still using the lecture and question and answer method.] [A student gives what the teacher views as a wrong answer, instead of explaining why the answer is not correct, the teacher goes on to give the students the correct answer.] [The teacher asks yet another question; How does fair control heat?] [Only one boy raises up his hand. Teacher waits for about 2 minutes to give other students time to think through the question. Apart from the one hand, no more hands are raised. Teacher poses another question. Three boys raise their hands.] [Teacher says something in Setswana, frowning]. [A student gives an answer, which the teacher does not comment on. Instead, the teacher continues to call upon students, who do not even provide answers. Another student contributes, but again the teacher does not comment on the answer.] Yet another student gives an answer, and the says, ‘Ehe-e.’ The teacher proceeds to say something in Setswana, perhaps some form of explanation.

The teacher deletes an answer that was given earlier on by a student. He explains that this is a big word which shall looked at later on. [The teacher explains how blood circulation controls body temperature.] [He
blood circulation controls body temperature.] [He writes the word sweat on the chalkboard], [and asks a question in Setswana, to which students respond in Setswana in chorus form]. One girl continues to fan herself using a book, the sound of book pages disturbs others as could be seen from the frowns from other students.

[The teacher instructs students to look at some pictures in their textbooks,] [and then asks the students some questions in Setswana basing on the pictures,] [Chorus answers from various corners of the class are heard,] The teacher asks students whether they had any questions. Again students do not ask questions, teacher waits for about 50 seconds. The teacher informs the students that since they do not ask questions, he will ask them questions and expects them to answer, [proceeds to ask a question to which only 2 students raise their hands. One boy seated in the middle of the class is not even paying attention, has given his back to the teacher and is busy drawing something. Few students provide chorus answers, the question is left hanging.]

[Teacher write the word ‘hibernation’ on the chalkboard and asks the class what the word means. Before the students could answer, the teacher writes yet another term ‘estivism’. There is some uncontrolled talking by the students. Teacher explains the two terms and asks students to give examples, to which students give chorus answers,] Teacher continues to use both Setswana and
English as the lesson progresses. [A group of three boys is discussing something as the teacher is teaching.] Teacher invites questions from the class, unbuttons some of the buttons on his shirt and loosens his neck tie. Silence for about 2 minutes, again no questions from students.

It’s about 40 minutes since the beginning of the lesson, it’s end of the period. [The teacher asks another question, and then moves over to the group of boys that had not been paying attention and pinches the boys. Then he tells the class to respond to his question, moving from student to student, pinching those who will have failed to answer the question. This lasts for about 5 minutes. The teacher tells the class the answer to his question, and explains something in Setswana.] [Teacher hurriedly summarises the lesson.] For about 45 minutes, there were [no questions from students,] nor [student to student interaction.] Teacher tells the class to use the remaining part of period 8 to [write notes.]

| off-task behaviour. | question and answer. | teacher summary. | no questions from students. | no student-student interaction. | writing notes. |
Appendix 5

Field notes

2D Maths Date 10/13/2003

[ ]: Coding range.

<table>
<thead>
<tr>
<th>FIELD NOTES</th>
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<tbody>
<tr>
<td>Lesson 4. It is midmorning, and quite warm. [Teacher enters the classroom</td>
<td>use of Setswana by teacher.</td>
</tr>
<tr>
<td>and says something in Setswana.] [Writes a solution to a previous problem</td>
<td>solution from teacher.</td>
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<tr>
<td>that was badly done by most students on <em>Appreciation</em>, tells the students</td>
<td>off-task behaviour.</td>
</tr>
<tr>
<td>to copy the answer into their ex. books.] [A number of students are just</td>
<td></td>
</tr>
<tr>
<td>seated doing nothing.] Teacher asks whether students are through to which</td>
<td>teacher marking books.</td>
</tr>
<tr>
<td>they say no. It’s almost 5 minutes since the start of the lesson. [</td>
<td></td>
</tr>
<tr>
<td>Meanwhile the teacher is busy, marking books he has brought from the class</td>
<td>teacher talk.</td>
</tr>
<tr>
<td>next door.] 10 minutes into the lesson, teacher cleans part of the</td>
<td></td>
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<tr>
<td>chalkboard, and writes SIMPLE INTEREST, turns to the class and asks</td>
<td></td>
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<td>whether students are through. [Teacher draws students’ attention to the</td>
<td></td>
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<tr>
<td>topic on the chalkboard. He reminds the class the topics that were</td>
<td></td>
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<tr>
<td>covered before that are related to this new topic. Tells the class the</td>
<td></td>
</tr>
<tr>
<td>information covered, without involving the students in revising the work</td>
<td></td>
</tr>
<tr>
<td>covered.]</td>
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</tbody>
</table>
Teacher introduces lesson on Simple interest, by stating that employees keep money in the bank, explaining that if you deposit money in the bank, it will earn interest. [Teacher explains what interest is, using Setswana.] [Teacher works out an example on the calculation of interest.] He explains the relationship between principal and interest. [Teacher instructs students to open textbooks (page163) and look at an example on the calculation of simple interest.] [Teacher reads out the example to the class. Teacher explains the difference between interest charged by the bank on the customer for borrowing money, and interest accruing to the customer after depositing money into the bank.] [Teacher asks the class to explain the meaning of depositing money.] [A student gives an explanation.] [teacher reinforces the explanation.] [Four boys at the back of the class are not paying attention, they are busy charting.] [Teacher works through the example, asking questions as he does so, [to which students respond in unison] (chorus).] (Observer comments: Why not ask a volunteer student to work out the problem. If she/he fails then encourage other students to help, instead of just giving out information).

20 minutes gone. [Teacher works out yet another example.] [One boy seated near the researcher is busy writing something, and not paying attention.] [Teacher works out yet another example, reads out the question from the textbook and proceeds to work out the example on the chalkboard, accepting chorus answers from a section of the students, at times explaining the use of Setswana by teacher. teacher writes on chalkboard. reference to textbook. teacher talk. teacher questioning. student talk. teacher reinforcement. off-task behaviour. teacher writing, questioning. chorus answers. teacher writing. off-task behaviour. teacher writing.]
procedures in Setswana. After working out the example, the teacher writes a formula that is used for calculating simple interest, and tells the class that using the formula is the simpler way of calculating simple interest. [Using an example that has been worked on already, the teacher demonstrates to the class how the formula works.] [At this juncture, teacher invites questions from the class. No questions are asked.] [Teacher emphasizes that students should know the formula that is used for calculating interest.]

30 minutes gone in the lesson. [Teacher explains how to calculate simple interest when the rate of interest is given in fractional form. Gives an example.] (Up to now students are just passive recipients). 40 minutes into the lesson, ciren rings to mark the end of the lesson. [Students are assigned written work, same assignment for the whole class.] Teacher moves out of the classrooms, going for her next lesson with another class. As the teacher leaves, students start to talk to one another, while waiting for the next teacher.
Appendix 7

Coding master list

Peer teaching
Motivate low performers
Labelling
Self-fulfilling prophecy
Teacher expectation
Low quality teaching
Varying teaching methods
Breaks monotony
Students compete
Motivates the teachers
High achievers become role models
Challenge for teachers
Professional satisfaction
Professional development
Reflect society
Hidden curriculum
Breeds tolerance among students
Difficult to monitor work
Time constraint
Teacher-pupil ratio
Demands a lot of preparation
Syllabus coverage
Difficult to individualise
Teachers impatient with slow learners
High achievers resenting working with low achievers
Education system does not cater for mixed-ability grouping
Teaching examination-based
Special needs cases
Teachers have limited skills
Automatic progression
Language of instruction
Use of Setswana
Reinforcement
Culture of the school
No equal educational opportunities in mixed-ability classes.
Prefer ability grouped classes
Prefer mixed-ability classes with reduced class sizes
Varying teaching strategies
Using discussion strategy you reach many students
Interactive teaching
Remedial teaching
Other tasks not teaching related
Extension work
Special education teachers
Special education schools
Identifying special needs cases at primary school level
Educational psychologists
Educational Assessment at primary school level
Criterion referenced is objective
Prefer criterion referenced testing
Criterion referenced testing best for mixed-ability classes
Criterion referenced testing fair to students
Cultural bias in norm referenced assessment
Teachers lack criterion referenced assessment skills
Teachers’ training is adequate
Workload
Pre-service inadequate
Politically driven policies
In-service inadequate
Pre-service too theoretical
Pre-service adequate
Lack of resources
Teachers need recognition
Teachers have other commitments
No discrimination
Makes low achievers feel comfortable
Improved performance
Boosts students self-esteem
Higher achievers able to work on their own
Lowers performance of high achievers
Incompatibility between teaching and learning strategies
Behaviour problems
Low achievers have negative attitudes towards schoolwork
Translation distorts information
Ability grouping brings competition
Teachers teaching low ability classes suffer
Ability grouping makes it possible target instruction
Even streamed classes are mixed-ability
Use of teaching aids
Consider students’ learning styles
Differentiated group work
Cooperative Learning
High achievers dominating
Criterion referenced testing is better
Norm referenced testing makes students reluctant
Criterion referenced testing prepares an individual
Criterion referenced testing will bring hands-on experience
Criterion referenced testing is about quality
Norm referenced testing does not promote learning
Criterion referenced testing is diagnostic
Pretence during Teaching Practice
Qualified teachers rarely prepare teaching aids
Heavy teaching loads
Lack of resources
In-service workshops too general
Reflect society
Use within-class ability grouping at times
Ability grouping makes teaching easier
Criterion referenced testing good if employers consider it
Criterion referenced testing not make our students competitive
Criterion referenced testing a true reflection
Norm referenced testing only good for selection
Criterion referenced testing is broad
Question and Answer method
Drilling
Pupil-pupil interaction
No differences between methods
Feedback skills
Assessing skills
Questioning skills
Special education skills
Skills in organizing and managing group work
Differentiating skills
Try to cater for all learners
Education is for all
Monitoring
Questions to low achievers
Field excursions
Lack knowledge about students
Mixed-ability grouping here to stay
Teachers to support it
Changes in pre-service and in-service teachers’ training
Same assignment
Teacher talk
No questions from students
Teacher writing
Off-task behaviour
Chorus answers
Teacher reinforcement
Question and answer
Reference to textbooks
Teacher writes on chalkboard
Teacher marking books
Solution form teacher
Writing notes
No student-student interaction
Teacher summary
Limited responses
Teacher ignores incorrect answers
Lack of reinforcement from teacher
Empty display boards