

Manumission focus group discussion

Stanza 1

1. BT So what we're going to do today is we're just going to have little chat, much about what happened yesterday. I had a look at what you've done and what you've written about the problems and I'm going to ask you some questions and that sort of thing. So it's just going to be very relaxed, it's just a chat, it's not a test or anything like that. I think we'll just start off by say, you telling me a little bit about yourselves, who you are, where you come from, so we can get to know you little bit. Let's start with Danny...
2. Danny My name is Danny, I, I, stay here in Mamelodi. I live in district [?].
3. BT Alright. And Mafifo?
4. Mafifo My name is Mafifo. I live in extension [?]. I live with my mom... and I attend school here...
5. BT Alright. [Moves digital recorder because of background noise]
6. Hartman My name is Hartman, and I come from Johannesburg, but I live here with my grandmother at [?] in Mamelodi.
7. BT So, you're from Johannesburg? That's interesting, okay. Right, and Rosina.
8. Rosina My name is Rosina [and surname], I'm 15 and I live here in [?] here in Mamelodi, and I live with my mother and my [inaudible].
9. BT Okay. Right, thank you. You know who I am because I already introduced myself... Okay, there were a few things that you wrote... umm, and I'm going to ask you questions... I'm going to jump around and just ask various people.

Stanza 2

10. BT Let's start with Hartman. You said that word problems that you were given, that you were given yesterday were good. Okay, you remember writing that? You were asked to say what you think of word problems and you said you think that they were good.
11. Hartman The word problems?
12. BT Yes. Okay, can you tell us in what sense did you think the word problems were good?
13. Hartman The word problems is good but we don't, we don't use our common sense because if a teacher gave you about something, you said, no, I can't do this because... because I can't ans..., I didn't understand it... [inaudible]...
14. BT Okay, but in what sense are the word problems good? Why do you think they are actually good?

Stanza 3

15. Hartman Word problems? Isn't it because if they are problem it's good in [background noise]... if you don't have a problems it's not good.
16. BT Alright. Mafifo, you said that the word problems that I gave you were not what you

expected them to be.

17. Mafifo I expected them to be something that we are doing in class [?].
18. BT Can you give me an example of that?
19. Mafifo Yeah, we do like simplify, simplifications and things like this... I didn't know that we were going to do word problems.
20. BT Ja. So you thought it was going to be more standard maths, not a word problem type of thing?
21. Mafifo Yes.
22. BT Okay, that explains that one to me.

Stanza 4

23. BT Right, Rosina...umm, you said that word problems need to be put together to find something. Okay, that's what you said in the first paragraph you wrote. What do you mean by put together?
24. Rosina Like, you have to put one and one together to form two, because one plus one is two. If you don't like understand what it's saying to you then like you can't find the answer, like you can't find, you can't solve it if you don't understand the problem.
25. BT So, the one plus one comes from the word problems, is that what you say?
26. Rosina Yes.
27. BT Okay, and you've got to put them together?
28. Rosina You have to put that together to find the answer.
29. BT You find one answer, so that's what the one thing is that you find?
30. Rosina Yes.
31. BT Okay, so it might not be two things, it might be two or three things that you have to put together, is that what you're saying? That's quite an interesting way of thinking of it.

Stanza 5

32. BT Okay... umm right Danny, something that you said. You gave a very interesting description of word problems. You said they're made up of words that explain numbers, which I thought was a very nice way of putting it. But, can you tell us just a little bit about what you mean by that? You say that the word problem is made up of words, and those words explain the numbers.
33. Danny Yes, I'm trying to explain that if... umm, you don't understand the words of the word problem you work it out like a multiplication sum... If you don't understand those words, you cannot do the numbers. You must first understand the words that you see in order to do the problem.
34. BT So, the numbers are in the words?

35. Danny They are in the words.

36. BT Ja, that's very interesting that.

Stanza 6

37. BT Okay, but then you also said that you cannot deal with the numbers without knowing the words. You're more or less saying that now, but what is it about the words that you need to know?

38. Danny The words, you must start knowing, know the mathematical words and English words, unless you know those words you... [inaudible]... to do the mathematics.

Stanza 7

39. BT Okay, so there are mathematical words and English words. Now what do you mean by that? Can you explain some more?

40. Danny Err, English words... err, you must learn English, you must start to know English, if you know English you can then use the words... umm... In the...

41. BT Are you talking about the meanings of the words?

42. Danny Ja, the meaning of the words. If you know English... err, in, in the textbook of the mathematical or other books they mostly use English words, yes, and you must understand those words in order to do mathematics. For example like a person know, that don't know English he cannot [inaudible]... but if a [inaudible]... that person knows that numbers, but he does not know English... So if you know English you know the meaning of the mathematical words to do it.

Stanza 8

43. BT ... [repositions digital recorder]... I'm just going to stick with you for a minute because I'm interested in what you're saying... I'm, I'm happy with the English words and the meaning of the English words. That is a difficulty without a doubt. But you said something about mathematical words. Okay, what kind of mathematical words, can you maybe give me an example?

44. Danny Mathematical words, if some things in mathematical, they say find the product of something you know, and, and sometimes in English they teach you about the products... If you don't know how, how to do different, to, if you don't know difference, like the product or sum, find the sum, you must understand that those are the mathematical words.

45. BT They're not words that we normally use.

Stanza 9

46. BT Okay, very good, that's very interesting. Right, I like to come back to Mafifo. You said in your first paragraph that I asked you, you said that word problems are, are a little strange sometimes. Umm, what did you mean by strange, firstly?

47. Mafifo Sometimes they are not specific. You don't know what you are looking for, and what is, and what is the whole problem.

48. BT So, strange you mean sort of peculiar, a bit funny in a way?

Stanza 10

49. BT Okay, umm, and then, what is it about word problems that you find strange, inside

the problem itself? You said that it is the words etc. but what is it exactly that you find strange in the word problem?

50. Mafifo I find it strange, but in the words they don't give you enough information. Like problem 3 they don't give us much information that you can use in order to find the distance.

51. BT Okay, so in other words you think that the word problem... umm, looks as though it can't be solved, is that what you saying? [Mafifo nods.] Okay, that's quite interesting as well because...

Stanza 11

52. BT The thing is when they give you a word problem do you think they're going to give you a problem without enough information?

53. Mafifo No.

54. BT So, the information must be there, that's not easy to see... is that what you saying?

55. Mafifo Yes.

56. BT Okay, that's interesting.

Stanza 12

57. BT We come back to Danny. Okay, you said that word problems are confusing. Now, some people have already mentioned that or something to that effect. Can you explain what for you makes them confusing?

58. Danny What makes them confusing... well, something... err, the word problems that makes them to be confused is some other words which I don't under, I don't understand them, you know, and that contain English that I don't understand those meanings of those words. Err... sometimes if they give you the paragraph, you become confused because you don't understand the meaning of the words, that's why they are confusing sometimes.

59. BT Okay. So it is not the actual question that they are asking you?

60. Danny No. But other words there.

61. BT Ja. So normally you know what the question is asking you, you find that?

62. Danny Yeah, I know the question.

63. BT So, so it's the meaning of the words...?

64. Danny Ja, the meaning of the words.

65. BT Right, that's interesting.

Stanza 13

66. BT Then Mafifo, we come back to you. You also said that word problems are confusing but that I think you actually said more words are confusing, which I think is the same as what Danny is saying. But which of the words confuse you? Can you try and help us... be a bit more specific about that?

67. Mafifo Okay. The whole paragraph, ne... before the question, they give you the information but in the information the words that they talk about like [inaudible]... the words themselves. You understand them and you know them, but they don't go with that whole paragraph, words... Okay, they don't go with the whole paragraph... you don't know what you are supposed to do.
68. BT Right, so it doesn't tell you what you supposed to do with the information...
69. Mafifo ... and with the question.
70. BT Alright, because they are describing the words... are you talking about words like product and sum and things like that?
71. Mafifo Not that words.
72. BT Not those, right. Words like that maybe...?
73. Mafifo The words that are in the problem like find the distance between school and home...
74. BT Yes, okay, but there's no way to find it, they are not telling you how to do it. Alright, I think I'm with you there.

Stanza 14

75. BT Right, Hartman, you said that you felt bad because you didn't know these problems. Okay, you wrote that you feel bad. Can you just tell us a little bit about how you felt, how did you feel when you were trying to do those problems?
76. Hartman I was thinking that I would write something that I knew that I feel bad because I didn't write something that I knew. That's what I was thinking.

Stanza 15

77. BT Right... umm, and why do you think you don't know these problems... you have any idea of why you don't know the problems?
78. Hartman I don't know because they didn't teach me before. If they teach me before I would know them.
79. BT So you haven't actually done word problems as such?
80. Hartman Yes.
81. BT Did you not do word problems at primary school?
82. Hartman No.
83. BT You didn't do them at all, where they just give you arithmetic problems like in words... where they say you've got so many sweets, and this one's got so many sweets... You didn't do those kinds of problems?
84. Hartman No, I didn't do it.

Stanza 16

85. BT Okay. Umm, and then what, what did, what did you actually do to solve the problems? Because you didn't know the problems, what did you actually do, can you tell us how you actually went about it, trying to solve the problems?

86. Hartman I was try to, I was thinking about the problems... if I did it like this I would get a answer.
87. BT But, in what way were you going to get the answer?
88. Hartman What?
89. BT How were you going to get the answer? Were you looking at the... umm, the question?
90. Hartman Yes, I was going to read the question...
91. BT ... you were obviously reading the question, and then where were you going to get the answer from?
92. Hartman I get an answer because I've been reading the questions, and some questions I understand them and some I don't understand them.
93. BT Okay. Alright, so you just try to translate them.

Stanza 17

94. BT Okay, Rosina... Okay, you said that word problems are simple rather than numbers. Umm... I'm not sure that I actually understand what you meant by that. Can you explain a little?
95. Rosina Yes, yes I said some of them...
96. BT Yes, some of them, you did say that, that's right.
97. Rosina Yes, some of them they are like simple like I understand it... in problem 2 I find, I found it easy for me like to do... and some of the numbers you can't understand what to do like what you have to add, subtract, divided, multiply... you don't know what to do.
98. BT Okay, so you saying that some other word problems are simple but some of them are not when you have numbers... is that what you're saying?
99. Rosina Like... no, numbers like, I say numbers they sometimes difficult because you don't know how to get those answers, but in problems like word problems they give you, they sometimes give you enough information like for what you must do like how to get an answer.
100. BT So can you just give me an example of like one of those problems with numbers?
101. Rosina Umm... problem 2, like the ones that like tell you how much... is problem 1 or problem 2, I think it is problem 2, or one of the two, they wanted to know like how much the clear television and the... err, that one yes...
102. BT That was problem 2, yes.
103. Rosina Ja. They wanted to know how much, per day the rent would be equal money. So I find them like, I found that easy. It had numbers like how much would you pay rand a day and how much rent...

104. BT Okay, so I think I didn't understand you correctly here because you said that sometimes word problems are simple... umm, because they have numbers, is that why you, what you say? Because they have numbers that you can work with...?

105. Rosina Ja, they have numbers that you can work with.

106. BT Ja, okay I understand now.

Stanza 18

107. BT What would you find difficult then in maths? Do you think that other maths is more difficult than word problems?

108. Rosina [Nodding agreement] Yes, yes...

109. BT It's just quite interesting... things like equations and factorising...

110. Rosina ... and geometry... factorising is simple... and trigonometry...

111. BT Okay, that's interesting.

Stanza 19

112. BT Okay...umm, and then what makes word problems difficult for you, because now you said some of them are easy, and that, that word problem number 2, I know you solved that very quickly,... umm, what makes them difficult for you?

113. Rosina Some of them they are not, they don't give you enough information. They are like, they are not specific, you don't know what to do like, they don't give you like... I think that they give you enough information it's just that you don't understand it. Yes, you just have to do like...

114. BT Yes, I think that's how it is, you're quite right. But from what you're saying you don't think that there's enough information there, and other people have said that, yes.

115. Rosina They are not specific to what they want. Okay, no... it... I know what they want, but I don't, they don't give us enough information to like, how to work it... ja...

116. BT ... like problem 3?

117. Rosina ... yes... like how to work it out.

118. BT Alright, that's interesting.

Stanza 20

119. BT Umm, let's come back to Mafifo... staying with the girls. Okay, you said that if someone doesn't understand they might end up doing the wrong thing. Do remember saying that? Okay, now who is, who is that someone, to start with?

120. Mafifo So... okay, if we are in the class and a teacher is teaching us then maybe a person, someone doesn't understand then what the teacher is...

121. BT ... so the someone is one of the learners in the class?

122. Mafifo Yes, someone who doesn't understand, and he or she is afraid to ask the teacher.

At the end of the day if you didn't understand one thing while the teacher was teaching him then he didn't get anything... you can't even do the sum.

123. BT Okay, that's very interesting because...umm, it's one of the learners, particularly people who don't ask questions. Yes, that's very interesting.

Stanza 21

124. BT Okay, then in what way do you suggest that, umm, you might not understand the problem? Umm, what is it about the problem that you don't understand?
125. Mafifo They give you the information... sometimes in the question they have numbers, sometimes the numbers is about metres and kilometres, and sometimes it's just the number or money. You don't know in the money must I subtract the total amount or divide it.
126. BT Yes, so you don't know what to do with that, with those numbers, is that what you say?
127. Mafifo Yes.

Stanza 22

128. BT Okay. We're sticking with the ladies for the moment, hey? Okay, Rosina you said that... umm, that they should be more specific, now you've already addressed that... umm, they should be more specific and try and explain more in the problems, but I want to ask a little bit more about that. Who is they?
129. Rosina The... err, like the ones that are like giving us the question papers.

Stanza 23

130. Rosina Like if you said that question, that problems then you have to give us enough information... you have to give enough information for us to like work the problem out.
131. BT Right, so you saying you think they don't give us enough information... you've already said that there is enough information, there must be, but you are not able to see it. Can you just tell me a little bit more about that? What do you think is stopping you from seeing the information that you should be seeing?
132. Rosina ... [inaudible]... Well like as students like the other words like we don't know them... and the other like, sometimes it's kind of confusing, the problems are confusing, you can't understand what's going on. Like in problem [3?]. I didn't know, I didn't know actually what to do.

Stanza 24

133. BT Okay, let's take problem 3 since that seems to be coming up all the time. Can you tell me what it is about problem 3 that you found confusing... that you didn't know what to do, why, why didn't you know what to do? [Pause] Do you want to see problem 3? [Finds problem 3].
134. Rosina [Consulting problem 3] Like here you see a boy cycles from home to school in the morning and back in the afternoon. He cycles from home to school at 32 kilometers per hour and, and back at 24 kilometers an hour. It takes him 15 minutes longer in the afternoon than in the morning. I didn't actually know well like, they saying it takes him 15 minutes more, longer ne than, than if it took him 15 minutes longer than it took him in the afternoon...

135. BT That's right.
136. Rosina I didn't know what to do like what to add like, to add here or... I didn't know what to do, like what to do with this 15 minutes.
137. BT Now I'm starting to see where you... yes. So you didn't know how the 15 minutes related to the rest of the question?
138. Rosina I didn't know like what to do with it, like to add it, to divide, I didn't know, I tried everything and I didn't get the answer.
139. BT Okay, that's interesting, thank you.

Stanza 25

140. BT [Looking for place in the questions] Right...err,...umm, right Danny, we're back with you. You wrote that you feel that it is important to know word problems. Okay, now can you say firstly, what do you mean by to know word problems?
141. Danny To know word problems... eh, I mean that more especially when they teach you... err, they cannot just teach you the number without err, starting using the words. Like if they teach you maybe in the junior grade, they say a, the angle of a parallelogram is like, you know, they give you the information first. If you then know, if you don't understand the given information it will not be easy to do, to solve the whole sum. So it is important to know the word problems if you know how to deal about the words it will be easy for you to know many things.
142. BT Okay, in other words you're saying that to know the word problems is to understand what they are asking you and the words that they use in that... okay. Alright, then... now, so that's why you're saying that it is important, that if you don't know that then you can't do the problem?
143. Danny Yes.

Stanza 26

144. BT Okay. Rosina, you said, amongst a few other things as well, you said that word problems are given for the fun of it. Okay. You remember you were asked why do you think the teacher's give the learners word problems? And you said... umm, that it was for the fun of it. What did you mean by for the fun of it, to start with?
145. Rosina For the fun of it, like... like you have to like, you have to like use your [?]. Like sometimes like they give you word problems just to see if, what you can, what you can come up with.
146. BT Okay, so they giving it to you as a challenge?
147. Rosina Ja, as a challenge...
148. BT Okay, alright...
149. Rosina ... to see what you can get.

Stanza 27

150. BT Okay, so then...umm, then you said... I got the impression that you like word

problems, sometimes, not all of them. You said that you enjoy them, that you get some kind of enjoyment out of them. Can you tell me what it is about word problems that you actually enjoy, the ones that you like of course?

151. Rosina The ones I like [chuckles]... [inaudible]... like I said I wrote that I like them because like problem 2 like it was talking about money, and I love working with money... Some of the problems are talking like, are talking about money and all those things. So sometimes that's kind of simple... you can work them out.

152. BT And then when you work them out do you feel, you feel that you've achieved something, when you actually get the answer.

153. Rosina Yes.

154. BT Okay. So, when you work them out do you enjoy them?

155. Rosina Yes, I enjoy them.

Stanza 28

156. BT And when you can't then you don't enjoy that? [Rosina nods.]

Stanza 29

157. BT Back to Mafifo for a minute. Okay, why do you think learners need to know how to solve word problems, because that's something you said in your paragraphs that you wrote?

158. Mafifo Okay... they are supposed to know because if they give you a word problem they are different, like... and you don't know even problem 1 how to solve it, you must know this time that you must solve it... [inaudible]... They are different, they are not like the same, and you know that, you must use this method to solve it.

Stanza 30

159. BT So there are different word problems that have different methods?

160. Mafifo ... so they must learn the methods, how to use...

Stanza 31

161. BT Okay, then in what way will that be important for learners?

162. Mafifo So that if they get the word problems they are able to solve them and... and they going to get them right.

163. BT Okay, so you think that they going to get them one day... umm, when they grow up or whatever? Do you think... err, or what do you mean? Do you mean just at school, when they get word problems at school, is that what you're saying?

164. Mafifo Not at school... even if they get them after they will know how to do...

165. BT So if they did a word problem like that, or a problem they will know how to solve it.

Stanza 32

166. BT Okay... umm... Rosina, to come back to you for a minute. You said that you can learn from word problems, and I think what you meant by that is that all learners can learn from word problems. Umm, can you give us an example of what you

mean by this, how learners can learn from word problems? Maybe you can tell us how you think this happens.

167. Rosina Yes, like I've learned a lot from like yesterday, I learned how to, how to like work with these word problems... can you please repeat the question that you asked?
168. BT Okay, I'm just saying that... umm, you, you basically said that learners can learn from word problems. So, either can you give me an example of how they learn, or maybe can you explain how they learn, what it is they are learning from the word problems.
169. Rosina They learn how, how to work with word problems, and they learn, they learn things like the words... they know the words, they learn... in word problems I think you learn more than in numbers. Like you learn like English like you do English and at the end in the other side you learn to work with numbers, so you can use, use like... you get two sides...
170. BT ... you doing more than you would do with an ordinary maths problem?
171. Rosina Yes, like you are balanced between two things like between learning English and you learn numbers at the same time.
172. BT That's very interesting. I've never thought of it that way. Okay.

Stanza 33

173. BT Right, Danny to come back to you. You also said that word problems are to help learners. So, it is a similar thing but in what way did you mean to help learners?
174. Danny Mmmm... I was meaning that if, because word problems are so difficult, if you are challenging learners with so difficult things... if you are doing word problems, if maybe they will give you something easy it will be easy for you to give it. If know I was meaning that the word problems are used to help learners when they grow up, or maybe they are, or maybe outside or everywhere, if you are dealing with to start with you will, you will understand them easily... maybe they are giving you something easy you will more understand it than the others, because of the language it's something difficult.

Stanza 34

175. BT Are you talking about understand the words, though? [Danny nods] Okay, so you find the words quite difficult?
176. Danny Ja, they were difficult. But if you are... using, doing it, it will become easy for you to understand.

Stanza 35

177. BT Right, umm. Those are really the questions I wanted to ask at this stage, but there's one extra question for this group, which I'm going to ask you [Rosina], because I'm very interested and I want you to tell me. Tell me how you solved the cork problem.
178. Rosina The what?
179. BT You know, the bottle and the cork. Problem 4.
180. Rosina [chuckles] Okay. Err...

181. BT The reason I ask you, I'll just put you in the picture... umm, the reason I ask you is because you've done something different to everybody else that I've done the research with. You are the only person who has done this so that's why I'm asking you, because I'm very curious to know. What did you do to solve the cork problem? Do you remember the problem?
182. Rosina Yes.
183. BT The problem says that the cork and its bottle together cost 11c. Okay, the bottle costs 10c more than the cork. How much is the cork?
184. Rosina I worked [chuckles]... like I just thought about it like, it wasn't like one cent, like it shouldn't be one cent... I just thought that it shouldn't be one cent. Like maybe it should be 50, 50, 5c. And the... err, the bottle it would, the bottle would be 15c. I just thought of it like, like it shouldn't be like that.

Stanza 36

185. BT Ja, okay. Umm... right, does anybody want to say anything else about word problems? Is there anything else that you'd like to add because that's, those are the only questions that I've got and I thought you might like to say something more.
- [No takers]