

1	Interviewer	Welcome, thank you for joining me today. I'm just going to ask you a few questions regarding children that are colour-blind also known as colour vision deficiency. Uhm if you can just be as open and as honest about your experiences. I would appreciate it.
3	Participant 9	Okay. Good, good, lets start.
5	Interviewer	My first question is what is your understanding of colour vision deficiency which is often referred to as colour-blindness?
7	Participant 9	So my definition uhm of colour-blindness is if a child can't see colour, meaning red or green, or any colour to do his work. Ja.
9	Interviewer	So discriminating between specific colours or cannot see colour in general.
11	Participant 9	No, no colour in general. Any colour Ja.
13	Interviewer	Okay. Thank you. And tell me more about your experiences of teaching learners who are colour-blind.
15	Participant 9	So uhm ja I am a foundation phase teacher, and uhm we didn't have, or in my experience of a teacher, uhm we didn't really have children that's colour-blind. But uhm ja, colour-blind as a teacher, colour-blind is a well known thing in schools, because the teachers can't, can't show it out or know how to work with children that's colour-blind. Even if they have to do test. And then like, for instance, in Grade 1, we often use lots of colour to do the test. So please colour, please colour the, the circle orange or, and then you will find uhm two or three children that that the colour is orange, and then they take red. They ja they will colour that circle red. And sometimes you just mark it and you don't understand why. Maybe they just don't know their colours. But actually they they don't they don't see the colour orange as red. So ja then they have it wrong.
17	Interviewer	Is this something that happens quite frequently?
19	Participant 9	No, not really. No.
21	Interviewer	And if a child uhm does that, you actually don't, do you ask questions and investigate further or do you just assume they misunderstood the question?
23	Participant 9	Like in my case, I'll ask I'll ask uhm the child if I see this child gets it more than twice or three times wrong in their test, I will go further. But that's not the case in every every uhm foundation phase, teachers will just mark wrong, they will not investigate further they will they don't have time to go and sit with the child and see where the problem is. So they will mark it wrong.
25	Interviewer	Okay. Thank you. So tell me a bit more about how do you use colour when teaching and also when you're involved in after school activities.
27	Participant 9	So in teaching, I will write on, in my class, I have a grade three class, so in my class I will use colour a lot of colour uhm on on the board because we start with with black and then after break, all my children know after break, we'll start with a new colour and that's green. So they know first break I have to do the this work and second break I'll start with that colour. So my pens on my board. Those this is the colours is black, and then green and then red for for intermediate phase work that we do on the board. We will do it on on the other side of the book but in red. So green and red is your your most common colours that the children can't see. So uhm ja but the the other colours is that we do have they can't see all of the children can't see that so we have an orange as well. So ja, I use I use a lot of colours on my board. And even on the sport, is in the sports obviously the cones, the different cones, and the flags that we that we use. And even if they go out for life skills, there's a lot of colours that those teachers use. For those children to to get a certain mark. So ja.
29	Interviewer	Okay, so for example run to the red cone or...
31	Participant 9	Yes, or if you go to your if you have the hoopels, you know, the hula hoops you have to do two legs in the orange one, or the pink one, or the blue one, or the red one, whatever. So in that, in life skills we do use a lot of colours.
33	Interviewer	Okay, uhm you just now mentioned I'm just going back to using colour in your class, you mentioned that sometimes you use colour in tests as well. Will you elaborate on that for me please.
35	Participant 9	Yes. So in my tests uhm I would normally give them an Afrikaans as well, I will give them a script like, like a little story. And then I will say uhm, (it's Afrikaans school) uhm please circle the vocabulary, all the vocabulary words uhm in pink or in red, so they have to go back to the script and do that in colour as well. And then also, even in mathematics, we use colours as well we will say uhm forms like three dimensional or we will give them all the forms, and then will say, colour all the, two dimensional colour that orange or whatever. But yeah, we do use a lot of colour as well in tests. And that's also a thing that we we are struggling with. Because it doesn't, if a child get it wrong or right, it doesn't mean he can't do the maths. He just can't do the colour.

7:1 So...	Awareness
	Understanding

7:26 So uhm ja...	Working with learners w...olour blind/ experience	7:2 a... Awareness
7:3 But uhm ja, colour-blind as a teac...	Challenges for learners who are CVD	Becoming aware
	physical barriers in scholastic resources	
	use of colour during instruction	

7:4, I'll ask I'll ask...	Challenges for learners who are CVD
	Teacher support (training)

7:5 So in teaching, I will write on, in my class, I have a gr...	Challenges for learners who are CVD
	physical barriers in scholastic resources
	use of colour during instruction

7:6 hoop...	Challenges for learners who are CVD
	physical barriers in scholastic resources

7:7 So in my tests uhm I would normally g...	Challenges for learners who are CVD
	physical barriers in scholastic resources
	use of colour during instruction

37	Interviewer	We assume that they cannot do the math, but it can mean that they struggle to differentiate between the colours. That so interesting. Uhm and then if you, let's first ask the next question. So how is colour used in the resources you use for learning for example, in the textbooks and the posters in your class?
39	Participant 9	So everything has colour. So even if there's a poster in my class, it's with colour, everything is in colour, if you read something also plurals that that's in colour. Uhm so everything in our textbooks if we go through, it's in colour. So we will say as teachers in my school. Uhm okay, please put your hands up, who can see the uhm dog or what's, what is the colour that the dog is or something like that. So everything in our text books or on the walls or everything is with colour. And I will normally say okay, uhm so look at the back, uhm ja the back poster. Uhm and then show me how many orange circles do you see in the poster or uhm what colour is the verb or the whatever circled in Afrikaans. So I would, in my class I would normally use the term colour a lot.
41	Interviewer	And uhm other resources, I'm trying to think of maybe having abacus or counters for maths, are they in colour?
43	Participant 9	Uhm ja, we don't, we do have abacus but we don't normally use that.
45	Interviewer	On Grade 3 level.
47	Participant 9	Ja, so so but in Grade 1 and 2 they use it a lot. Yes, ja.
49	Interviewer	And then, uhm trying to think what other resources there might be in the classroom.
51	Participant 9	Let's see uhm, what do we have, we have shapes, that's that's also like in Grade 3, we have our shapes that's that. And then we have uhm like a reading activity, but it's a window we call it like a window activity. So there's a, you have a script, and then the window can show you where you go to read. So to get those learners to read, and those are also in colour. So we will say, okay, uhm this is a Grade1 sentence. Go get the window that that's yellow, so it's a window that they put in the page and then for the learners that uhm gets to the next step it's red. So we say, let's read, you are now at the red level so that they know for the next time, there's levels and that's also to differentiate.
53	Interviewer	So it's basically used in an instruction, in writing on the board on the posters, their work big books, do they also use the uhm – want to say reenboog reeks - the rainbow uhm books that come from the department?
55	Participant 9	Yes, everyone use that.
57	Interviewer	Tell me a bit about the colour in those books.
59	Participant 9	Yeah uhm I actually want to but I don't have it. I wanted to show you but that's also very colourful and they also use that the term colour a lot, so colour this in or take that or uhm even in the books we the teachers uhm mark with a red and green, so in those books as well it's a lot of colour everything is colour.
61	Interviewer	And as someone mentioned to me that in the rainbow books that uhm the writing isn't all in black, the writing is even often in colour like for example the vocabulary words or the uhm specifically on what you focusing on.
63	Participant 9	The alphabet, yes yes. That's 100% correct. So its uhm, most of it is in black, but there is activities that are in like, I saw one in yellow and how hard is a yellow scripture to read, you can't read it. So ja.
65	Interviewer	Sjo so there's actually a lot of colour. According to you, which challenges are faced by learners who are colour-blind within the school context?
67	Participant 9	Sjo, a lot, because like I said, everything is colour. So if you can't see the colour, and there's a question that you're going to have it wrong. So with 10 points, you know what it says because you can read. You can't, just can't see the colour. So it's hard, it's hard and ja there's a, if if the child is colour-blind then it's, it's really a difficult barrier for him to overcome.
69	Interviewer	So in test actually being able to follow that instruction?
71	Participant 9	Ja, that's that's hard because the teacher is more than 30 children in her class, and this is just a normal school and if you don't have time to go back to that child and sit and do each question about colour one on one with that child, there's other people around so it's ja, it's..
73	Interviewer	So are you then saying that there might be children who are colour-blind within, for example your class, but because the class is so big and also their curriculum is so full, that he won't have the time to identify.
75	Participant 9	Ja, I miss that because obviously the child uhm if he doesn't know and I don't know and he's a bit, he's not afraid of me, but he's stressing or he looks at his his uhm friend or asked his friend, give me a red. He doesn't know, he can't see, but his friend gives him because they are small children they give him a red and then he colour. So he's not afraid, he just, I can't see it. So focus on that, and that's the big thing about big schools. There's nothing wrong with the child. He's just colour-blind. And I don't, I am honest, I don't have time. I don't have time to go back to that child and do two or three questions all over again. So ja.

7:8 So everything has colour. So even if t...

Challenges for learners who are CVD
physical barriers in scholastic resources
use of colour during instruction

7:9 We have shapes, that's that's a...

Challenges for learners who are CVD
physical barriers in scholastic resources
use of colour during instruction

7:10 eah uhm l...

Challenges for learners who are CVD
physical barriers in scholastic resources
use of colour during instruction

7:11 nd as someone m...

physical barriers in scholastic resources
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7:12 So if you can't...

Challenges for learners who are CVD
Emotional/ social impact

7:13 that's t...

physical barriers in scholastic resources
Teacher support (training)

7:14 So are you then saying that there might...

Awareness
Becoming aware of learners who are colour blind
Challenges for learners who are CVD
Learner support
Other learners awareness
Teacher support (training)

77	Interviewer	Still to determine what is causing that he doesn't understand that question. It's interesting uhm so when the question was, let me just get to it, according to you which challenges are faced by learners what I'm hearing now is specific academic challenges that you're referring to uhm not being able to follow instructions or struggling in tests or getting lost on the page. Besides academic challenges can you think of other challenges these children might face?
79	Participant 9	Ja, uhm, let me just think uhm. In normal life as well uhm because obviously when he needs to get a driver's license or outside with his normal life and just like buying stuff and just to know that as well the colour so ja there's a lot of things. Actually if I think about it now there's there's a lot of things if you are colour-blind.
81	Interviewer	Okay. So how can schools accommodate learners who are colour-blind within the school system? Please provide me with practical examples or suggestions.
83	Participant 9	So what I would say, is every I'd know every every school kind of have like a tutor or..
85	Interviewer	Or a teacher assistant.
87	Participant 9	Yes, but if you can, or if there's like students that can help these children they must come into, obviously the teacher must know okay, this child every time when it's that colour the child gets it wrong so there's a problem and then the student can sit with that child and work one on one with that child and say, listen here can you show me the green or can you show me and if the child is not able to show then the student can say okay, then show me the circle. And if the child gets the circle right, then you pick up the yellow and say this is the yellow, colour the circle that you showed me colour that circle yellow. So I would say the the the teachers gets someone that can assist her as well if it's a big class so uhm, and for outside as well for uhm the practical outside. The child can do two legs, let the child jump not in colour but like in a row, jump. Don't tell him to jump on one leg from the one, the green uhm cubicle to the red cubicle just jump one just jump there. Don't don't use colour.
89	Interviewer	Rather use sequence.
91	Participant 9	Ja, yes.
93	Interviewer	Okay, besides sequence is there anything else they can use?
95	Participant 9	Uhm no, no.
97	Interviewer	Not that you can think of.
99	Participant 9	No no sorry.
101	Interviewer	That's fine. Uhm so in a class, you mentioned that the teacher uhm first needs to pick up that there's a pattern where we struggle where colours involved with an instruction or a test, and then uhm make use of a teacher teaching assistants. Besides a teaching assistant having a teacher's assistant and being able to identify that learner can you think of other ways uhm to support or accommodate these learners?
103	Participant 9	And so when it started the with the teachers, she can identify the pattern she must if if she don't have a student obviously she must get it right, so one on one with the child as well even if it's after school. Just do those three or four points that are like 10 points of the whole test just do it one on one with the child, or uhm ask the parents to have like extra classes uhm so that you can help that child to do that.
105	Interviewer	To identify what the challenge is.
107	Participant 9	Ja.
109	Interviewer	Okay so if you've identified the challenge and the child is now in your class and you are teaching writing on the board and working in the workbook what would you do differently?
111	Participant 9	I will I will identify that which colour you can't see even if it's not on the board with the colours. We do have a chalk chalk board so that's white on green. So maybe you can see the white on the green or I can use other colours so that it uhm accommodates everyone so you can see maybe you can see purple. So I'll write in that colour for him. And then whatever colour he can't see I won't use that obviously because he can't see it. I know that he can't see it and then in my test, I'll do the same, I won't use those colours that he can't see.
113	Interviewer	So limit limit the use of colour to the colours that that child can discriminate between?
115	Participant 9	Yes.
117	Interviewer	And if there's someone in your class that you don't know is colour blind, can you think of ways maybe to change the way you teach to, to be more inclusive?
119	Participant 9	Ja see, that is hard because some children, they only, they learn better. Or they, they remember when I when I do the colours. And I was also like that I learned very fast in colours. But if it's only plain uhm then it's boring. So that's a bit actually a tricky one, because obviously, I'm a teacher who likes colour, but you know I won't use the the the colours, I will just do it as, like, normal, not normal. Uhm I would say, what do I want to say... I want to say like, I'll do my lesson without colour or as simple as possible. So that that the colour isn't that often used in my lesson.

7:15 If there's like students that can help these child...

Accommodate learners who are colour blind
Learner support
Teacher support (training)

7:16 And so when I...

Becoming aware of learners who are colour blind
Learner support
Teacher support (training)

7:17 I will I will identify that...

Accommodate learners who are colour blind
Learner support

7:18 That is hard be...

Accommodate learners who are colour blind
Colour perceptions by teachers
Learner support

121	Interviewer	Okay. So you say you are a teacher that that learns better and loves colour. So for you this would be a a challenge.
123	Participant 9	Ja, that will be a challenge for me.
125	Interviewer	And then you you mentioned that children learn better and follow instructions better when when they are in colour. Tell me about this.
127	Participant 9	So I'm a teacher that uhm makes a lot of jokes. So I like to, uhm to explain my things. While then everyone has to remember what I said. So when I do my lesson, I normally ask my children, okay, think of something, and then we'll draw it or we'll colour it in or think of a colour that you like, and you got to remember that. So every mathematics, when we, my children know, every every time that we get something new, have to get something new in our heads, we will start with green, I don't know why because they normally they love green. So my children know, in mathematics we'll do a hard mathematics sum we will do in green. So I promise you, I don't know why but I'll go I will when we get that under our knee. I'll say, Okay, let's do our green, green sums. So they will know okay that's the one this is the 'sometjie', that's the sum that had the star in or the circle of big circle or underneath has the green one. Okay, and then they will see, then they will remember, okay, our, our normal, normal class test that we do on a Friday those words are in orange. So I'll say okay can we lead with the orange words? Those words started with a what? That's our "s" words for the week, remember everything was in orange. So get your orange words go, then I'll say okay, then they'll know this is the word, I need to do the "s" words. So ja I do. I love colour in my class. So ja.
129	Interviewer	So it is used to categorize, it's used to refer back to something, for them to help them to remember or know where to find that page. It's actually used a lot.
131	Participant 9	A lot.
133	Interviewer	So how can teachers be supported to better accommodate learners?
135	Participant 9	First of all, I don't think, I know it is big classes, but if the teachers had, or the parents will let us know that the child has colour-blind, first of all that class can't be as big. I know it is a normal normal classes is like 30 and up in our school, but if we know that beforehand, I will say keep that keep the class a little bit like smaller. So that we can, not just go through work. We have to go be able to go back and say oh yeah, we have a colour-blind child. Let me just do it slower and maybe do it two or three times over but in different ways so that they also can understand.
137	Interviewer	So teach them in a different way.
139	Participant 9	Yes. Like your pattern can be, so I don't accommodate the colour-blind, but I do accommodate the others as well. I do it colour and I do it, even if it's double but it's fine.
141	Interviewer	Just for interest sake, let's say for example, you are now teaching this learner that's struggling to differentiate between colours. How would you change your instruction then?
143	Participant 9	I will say maybe like, like, in my class, I will say, okay, so take out your red, were gonna underline this vocabulary what what in what colour even, like in a pink and then I'll say it again, I'll go past and I will see obviously didn't underline anything. So then I'll say he must read it for me, you must read the sentence for me or we must read it together. And then he will take a colour that he can differentiate and he will underline as well. And if the other children didn't get it, they can do it with that. So it is ja.
145	Interviewer	Okay, so a bit of repetition and also using colour that he's familiar with.
147	Participant 9	Yes, he's familiar with, we will read again and again. Ja.
149	Interviewer	So coming back to my original question of uhm how can teachers be supported, uhm besides making the class smaller and being able to identify because often, they don't get identified. Have you got any other suggestions?
151	Participant 9	Uhm, with that.
153	Interviewer	The support teachers need.
155	Participant 9	The support teachers need? Like like a student?
157	Interviewer	Training, students, resources. Whatever you can think of.
159	Participant 9	Obviously I wanted to say resources so that they know uhm how to how... That's a that's a new thing. And obviously, it's a challenge for the teacher as well. So resources she must know okay. It's a challenge for me, but it's a it's more than a challenge for the learners. So I think resources is a very uhm...
161	Interviewer	So what resources?
163	Participant 9	Uhm I don't know, I am not there to, I don't know the colour-blind because there's no colour-blind in my class. But uhm for example, let's think uhm in my class if I had a child, so when I say resources, I will say uhm different activities, but I just need to think what activities. It's it's hard. It is hard.
165	Interviewer	It is hard. What makes it so hard. Is this something that you haven't had to think about before?
167	Participant 9	Ja.
169	Interviewer	So it's a new thing?

7:19 So I'm a teacher that uhm makes a lot of jokes. So I like to, uhm to e...

- Challenges for learners who are CVD
- Colour perceptions by teachers
- use of colour during instruction

7:20 First of all, I don't think...

- Accommodate learners who are colour blind
- Becoming aware of learners who are colour blind
- Learner support
- Teacher support (training)

7:21 I will say maybe like,...

- Accommodate learners who are colour blind
- Challenges for learners who are CVD
- Learner support

7:2...

- Accommodate learners who are colour blind
- Learner support

7:23 But uh...

- Challenges for learners who are CVD

171	Participant 9	So it's new. It's a new thing. There wasn't actually in my, in my past years that I teach, there wasn't actually a child in my class that was colour-blind. And I think as life goes on, I don't sit with a teacher. I do hear of it. I don't actually sit with the teacher and ask her okay, but..
173	Interviewer	How did you accommodate them.
175	Participant 9	Ja, so it's hard.
177	Interviewer	It is hard. So it is actually something that you haven't thought about before. And uhm in your training as teacher in your studies. Anything, any exposure to the concept?
179	Participant 9	As as I said uhm I did, we had learned about it, but it wasn't, there wasn't focus on it. Like, it's like we did that. But it wasn't like a topic. Like there was like maybe like one page or two pages that we read about it. So we know about it. But it wasn't like focus. There wasn't a focus on that, okay, that's a disability, we need to focus on that. It's just after you did your grade, you can go into colour-blind so then then there's more study. But not really.
181	Interviewer	Thank you for sharing. I appreciate it.
183	Participant 9	Thank you.
185	Interviewer	Is there anything else you want to add?
187	Participant 9	No. That's a very cool subject that you have there.
189	Interviewer	Thank you. Enjoy your day.
191	Participant 9	Thank you. Bye

193  
194

7:24 So it's...

Awareness

7:25 I did, we had lear...

Challenges for learners who are CVD

Teacher support (training)