

Third grade, Public Elementary School, Michigan  
 Friday, January 26, 1990

Seating Arrangement

1:55:11

Jeannie	Betsy
Maria	Daniel

Tembe	Lindiwe
Lucy	Cassandra
Mark	

Nathan	Sheena
Devin	Mei
Keith	

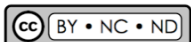
Ofala	Haroun
Riba	Sean
Tory	

January 26, 1990. The class is discussing a conjecture:

Betsy's conjecture:  
 An odd number plus an odd number equals an even number.

*This is one of several conjectures on the table in the class. Others include: an even number plus an even number equals an even number and an odd number plus an even number equals an odd number. The children have been providing examples of the conjecture and considering a revision Betsy had proposed but that the class ultimately ruled out.*

- 1 Teacher: Other comments about the conjecture? So right now we  
 2 saw that so far it looks like we might be able to use  
 3 different odd numbers. Did anybody come up with an  
 4 example that didn't work, for example? Did anyone find  
 5 an odd number plus an odd number that didn't equal an  
 6 even number? Jeannie, you found one?
- 7 Jeannie: Me and Sheena were working together, but we didn't  
 8 find one that didn't work. We were trying to prove that  
 9 Betsy's conjecture- that you can't prove that Betsy's  
 10 conjecture always works.
- 11 Teacher: Go on, Jeannie. Say more about why you think that.
- 12 Jeannie: Because there's- like numbers go on and on forever and  
 13 that means odd numbers and even numbers go on  
 14 forever, and so you couldn't prove that all of them  
 15 worked.
- 16 Teacher: What are people's reactions to what Jeannie and  
 17 Sheena thought? They said they didn't find one that  
 18 didn't work, but they don't think we can prove it always  
 19 works because numbers go on forever and ever. Ofala?
- 20 Ofala: I think it can always-
- 21 Teacher: *(Motions towards the other children)* Talk that way.
- 22 Ofala: I think it can always work because I tried almost...  
 23 *(counts the examples in her notebook)* Eighteen of  
 24 them, and I also tried a Sean number, so I think... I  
 25 think it can always work.
- 26 Teacher: Mei?
- 27 Mei: I think it could always work because with those  
 28 conjectures *(motions to several previously discussed*  
 29 *and widely agreed-upon conjectures, posted above the*  
 30 *chalkboard)* we haven't even tried them with all the



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31 numbers that there is, so why do you say those work? 58 Sheena: She just thought about it. That's why we were trying to  
 32 Well, we haven't even tried all those numbers that there 59 think about it today to see if it always works.  
 33 ever could be.

34 Teacher: So, are you agreeing with Jeannie or not? 60 Teacher: What do other people think about what Jeannie's  
 61 saying? Do you think we can't prove that it's always  
 35 Mei: I disagree. 62 true, or do you think that we can prove that it's always  
 63 true?

36 Teacher: But I don't understand. You're saying we haven't tried 1:58:39  
 37 all the numbers, that's what she's...

38 Mei: Like she's saying that we can't make sure it's working  
 39 because there's many, many, like- Numbers goes on  
 40 forever.

41 Teacher: Yeah.

42 Mei: Yeah, but we haven't tried- We haven't- She said that  
 43 it's not always true. Then why do you say that it's- that  
 44 those conjectures is not always true?

45 Teacher: Oh, you're talking about these? (*points at the posted*  
 46 *conjectures which Mei felt the class had previously*  
 47 *accepted*)

48 Mei: Uh-huh. But why don't you say that those are true  
 49 because we haven't tried every number that there was.  
 50 So you can't really say that those are true if you're  
 51 saying that you want to try every number there ever  
 52 was.

53 Teacher: Jeannie?

54 Jeannie: I never said that they were true all the time...

55 Mei: Then why do- then why didn't you disagree when like  
 56 Lucy and everybody agreed with those conjectures?

57 Jeannie: Because I wasn't thinking about it.

NAME	GENDER	RACE	COUNTRY	ENGLISH PROFICIENCY	HOW LONG AT THIS SCHOOL <sup>1</sup>
Lindiwe	M	African-American	U.S.A./South Africa	fluent	3 weeks
Nathan	M	White	Ethiopia	fluent	3 years
Betsy	F	White	Canada	native speaker	4 months
Daniel	M	Asian	Indonesia	developing	3 years
Jeannie	F	White	U.S.A.	native speaker	3 years
Keith	M	African-American	U.S.A.	native speaker	3 weeks
Tembe	M	African Black	Kenya	fluent	3 years
Mei	F	Asian	Taiwan	fluent	2 years
Lucy	F	White	U.S.A.	native speaker	3 years
Maria	F	Latina	Nicaragua	beginning	4 months
Mark	M	White	U.S.A.	native speaker	2 years
Ofala	F	African Black	Nigeria	fair	3 years
Devin	M	White	Nepal	beginning	9 months
Riba	F	White	Egypt	good	3 years
Haroun	M	Asian	Indonesia	developing	16 months
Sean	M	White	U.S.A.	native speaker	2 years
Sheena	F	African-American	U.S.A.	native speaker	4 months
Tory	F	White	U.S.A.	native speaker	3 weeks
Cassandra	F	African-American	U.S.A.	native speaker	16 months

<sup>1</sup>NOTE: This column reflects the length of time the child had been in this *school* as of 1/26/90. No one had been in this *class* longer than 4 months (since September).