
getting the (wrong) picture from the data

Data

An experiment was conducted in a kindergarten of the Grenoble region. Some of the teachers were trained to teach with an alternative pedagogy. The children of the school were divided into two groups, the first group following a classical pedagogy, the second the alternative pedagogy. The children were followed up over three years (2012-2014), and their scores are given below for the three successive years, when they were in the petite, moyenne and grande section. Each column corresponds to a child. The score is to be understood as a measure of competences, 9 being the largest value possible and 0 the smallest. The same test was given every year.

group 1 :

score in petite section	1,36	0,24	0,22	0,11	1,25	0,24	0,35	0,24	1,60	0,63			
score in moyenne section	2,07	3,60	2,57	4,29	5,67	1,67	2,43	4,72	7,67	3,83			
score in grande section	7,63	5,79	7,38	8,50	5,75	4,83	5,38	7,75	7,54	8,38			
0,68	0,00	1,44	1,86	3,47	0,58	0,00	0,82	2,75	3,14	1,58	2,83	1,92	0,83
5,13	2,31	1,00	3,74	6,64	3,39	2,36	6,75	5,13	8,00	7,08	6,01	6,25	2,61
7,50	6,17	5,68	7,25	7,54	5,64	6,46	7,50	8,75	9,00	7,25	7,42	6,58	8,25
2,47	1,13	1,72	0,61	0,35	1,11	1,24	2,36	0,50					
3,61	2,67	5,24	1,56	1,89	4,06	3,11	4,00	2,89					
7,46	7,21	7,50	8,17	6,96	8,00	6,92	5,71	7,00					

group 2 :

score in petite section	1,57	1,36	1,25	2,81	0,86	0,47	0,35	1,81	1,63	1,36			
score in moyenne section	2,26	3,68	6,26	3,88	6,54	5,25	6,00	6,67	4,96	2,57			
score in grande section	4,42	6,63	6,88	7,17	7,00	7,33	7,63	6,54	8,54	5,21			
0,35	1,75	0,35	2,58	1,58	1,67	0,60	1,63	1,06	0,00	2,17	0,25	0,00	2,67
1,64	5,83	6,42	6,88	4,46	1,94	5,50	1,71	3,33	2,28	5,67	5,32	1,56	2,32
4,46	7,00	6,50	6,00	7,25	5,47	7,63	3,83	4,92	5,96	6,33	7,13	4,61	4,13
2,33	1,13	1,22	1,33	1,00	0,83								
4,17	6,18	4,32	6,50	3,00	2,67								
7,00	7,25	7,88	8,50	5,21	7,00								

Steps

- Make graph(s) from the above data
- At the same time, note the important points in your approach to building the graphs
- Explain and argue your choices