

Stat101 Homework Short Report for Topic 06 B

Mean	Std.dev	Min	Q1	Median	Q3	Max
18.86	6.30	0.00	16.25	22.00	23.00	25.00
(75%)	(25%)	(0%)	(65%)	(88%)	(92%)	(100%)

Table 1: Summary statistics of the scores

Each of the 50 students were given 25 questions from a bank of 89 questions. Figure 1 and Table 1 give the overall summary of student performance. Table 2 lists the 21 students who scored below 80 percent on the assignment. Table 3 and Figure 2 provide summary statistics of the scores per question set and learning outcome.

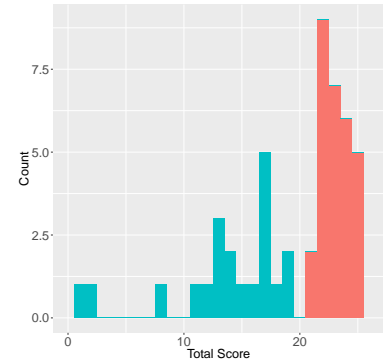


Figure 1: Histogram of scores. Blue data represent scores less than 80 percent.

% Correct		% Correct		% Correct		% Correct	
guercio	76.00	linchg	68.00	alldridgeg	52.00	hannahy	8.00
shehorn	76.00	mercedes	68.00	babinh	52.00	lakeas	4.00
tankm	72.00	gertvas	64.00	keesham	52.00	samorag	0.00
freeda	68.00	mallenl	60.00	conniff	48.00		
kendalls	68.00	hillenl	56.00	parkinsl	44.00		
ligias	68.00	kindlel	56.00	gaving	32.00		

Table 2: The 21 students whose percentages are less than 80 %.

Topic 06 Learning Outcomes:

- Use standardizing to determine how many standard deviations an observation is away from the mean value.
- Use z-scores to compare observations for different quantitative variables.
- Explain how standardizing affects the shape, center, and variability of the distribution of a quantitative variable.
- Determine which quantitative variables could be modeled using the normal distribution by interpreting graphical representations of the variable.
- Apply the 68-95-99.
- Find percentile or area values for any given observation from a normal distribution.
- Find the value of an observation when given a percentile or area value from the normal distribution.

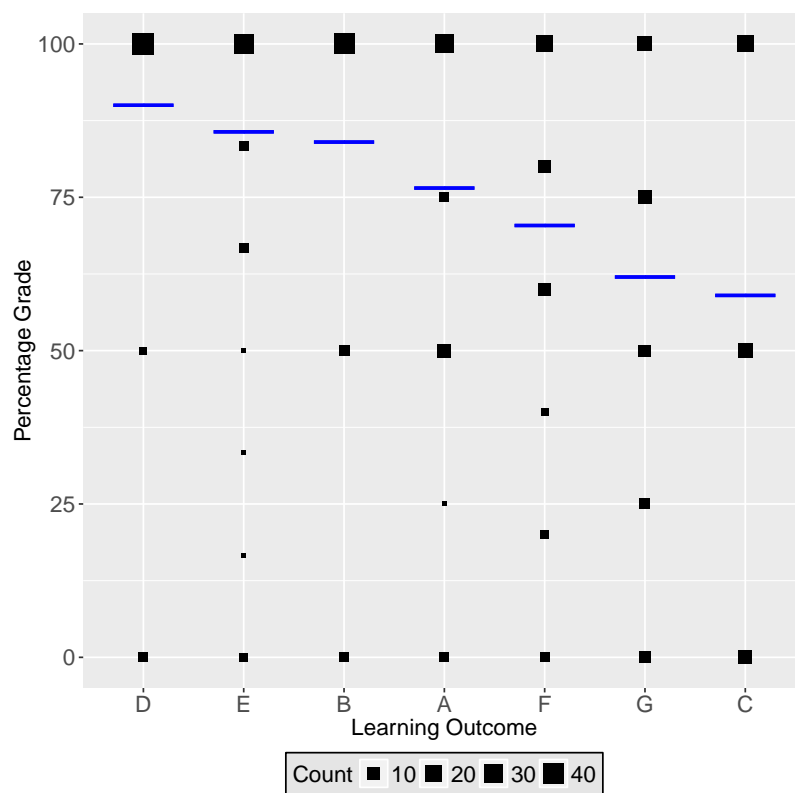


Figure 2: Fluctuation diagram of percentage correct by learning outcome. Mean scores are drawn as blue bars.

LO	Qset	#	Mean	Std.dev	Min	Median	Max
D	I	2	92	27.40	0.00	100.00	100.00
D	J	4	88	32.83	0.00	100.00	100.00
E	L	9	87.33	29.27	0.00	100.00	100.00
B	F	1	86	35.05	0.00	100.00	100.00
A	B	4	84	37.03	0.00	100.00	100.00
E	K	9	84	30.30	0.00	100.00	100.00
A	A	4	82	38.81	0.00	100.00	100.00
B	E	1	82	38.81	0.00	100.00	100.00
F	M	5	82	38.81	0.00	100.00	100.00
F	N	5	76	43.14	0.00	100.00	100.00
F	Q	5	76	43.14	0.00	100.00	100.00
A	C	4	70	46.29	0.00	100.00	100.00
A	D	4	70	46.29	0.00	100.00	100.00
G	R	5	70	46.29	0.00	100.00	100.00
F	O	5	68	47.12	0.00	100.00	100.00
G	S	5	66	47.85	0.00	100.00	100.00
G	T	5	62	49.03	0.00	100.00	100.00
C	G	1	60	49.49	0.00	100.00	100.00
C	H	1	58	49.86	0.00	100.00	100.00
F	P	5	50	50.51	0.00	50.00	100.00
G	U	5	50	50.51	0.00	50.00	100.00

Table 3: Summary statistics of the question sets. Rows are sorted by mean scores, which are marked red if less than 80 percent.