

Understanding CRCT Classroom Data File

This information sheet is provided to help you understand the CRCT classroom data files. Columns from the workbook will be grouped together within the explanation below. This should allow for clarity and understanding of the data file that will allow for a more in-depth and rigorous investigation.

Columns A thru F:

A	B	C	D	E	F
SystemName	SchoolName	Grade	Content	TeacherName	N_Students
Any District	Georgia Elem	3	LA	Jim Smith	20

Listed above is the school system, school name, subject tested, teacher of record, and the number of students within the testing class. The teacher of record may not be the name on the data file, but is the name submitted to CTB by the school district for each class.

Columns G and H, Columns W and X:

G	H
N_ERA	Mean_ERA
124	6.2

Column G is the total number of answers changed within a classroom. Column H is the average number of answers changed per student in the classroom.

W	X
N_WTR	Mean_WTR
68	3.4

Column W is the total number of wrong to right (WtR) in a given classroom. Column X is the average number of WtRs per student in a classroom.

Columns J and K, Columns Z and AA:

Min_ERA	Max_ERA
0	20

Column J represents the lowest number of answers changed by at least one student in a classroom. Column K represents the greatest number of answers changed by at least one student in a classroom. Both numbers can possibly represent more than one student.

Z	AA
Min_WTR	Max_WTR
0	9

Column Z represents the lowest number of WTR answers changed by at least one student in a classroom. Column AA represents the greatest number of WTR answers changed by at least one student in a classroom. Both numbers can possibly represent more than one student.

Columns I and Y:

I
Std_ERA
6.17

This is the total standard erasure deviation value of the given classroom.

Y
Std_WTR
3.02

This is the WTR standard deviation value of the given classroom.

Columns L thru S, and Columns AB thru AI:

L	M	N	O	P	Q	R	S
P10_ERA	P25_ERA	P50_ERA	P75_ERA	P90_ERA	P95_ERA	P99_ERA	P99_9_ERA
.5	1.5	4	10	17	18.5	20	20

Percentiles compared to the state average are important in any in-depth analysis of the data file. A simple way to read this data is to think of the percentiles reversed. In other words, if the 25th percentile on the data sheet reads 1.5, then this would mean 75% of the class had at least 1.5 or more erasures. In contrast, referring to column Q, 90th percentile, means that 10% of the classroom had 17 or more erasures.

AB	AC	AD	AE	AF	AG	AH	AI
P10_WTR	P25_WTR	P50_WTR	P75_WTR	P90_WTR	P95_WTR	P99_WTR	P99_9_WTR
0	1	2.5	5.5	8.5	9	9	9

With WtR erasures we will look at other columns. If the 25th percentile is 1 then this would mean that 25% of the class had at least 1 wrong to right answer. In contrast, at the 90th percentile, 10% of the class had at least 8.5 WtR answers on the test. Comparing these numbers to the state average can be quite valuable for anyone examining the data in question.

Column U and V: (always in red)

U	V
z_ERA	flag_3SD_ERA
7.396	F

Column U represents the size of the erasure flag based upon three standard deviations for the given classroom. The standard deviation is measure that shows us shows how much variation or "dispersion" exists from the state average (mean, or expected value). A low standard deviation indicates that the data points tend to be very close to the mean; high standard deviation indicates that the data points are spread out over a large range of values the state average. The standard deviation is represented as a number, in this case 7.396. Flagged classes will always be above three standard deviations. Column V is the flagged column. The class above was flagged for erasures, and an F in the column is used to denote the class was flagged for high erasures.

Columns AK and AL: (always in red)

AK	AL
z_WTR	flag_3SD_WTR
5.00	F

These columns can be read in much the same way as columns U and V, except these columns provide data for WtR erasures. Column AK is the score column, and again for flagged WtR classrooms it will possess a score above 3 standard deviations (above the state average), in this case 5.00. Classes that have a score of four or higher should be taken very seriously, as each point above three is a significant change. Column AL tells us if the classroom was officially flagged by the State. The class above was flagged. Any F appearing in this column signals a flagged classroom for high WtR erasures compared to the state average.

Column AM:

AM
corr_class
.844107

This column gives a classroom's correlation coefficient. Stated another way it reflects the relationship between the total number of erasures in a given classroom, and the WtR erasures also found within that same flagged classroom. This class had a correlation of .84, or an 84% correlation coefficient. The higher the correlation is (for example: over .90), the greater the link between total erasures and WtR erasures, suggesting the need for greater examination of a flagged classroom.