

Figure 1. Long and Wide Data Formats.

id	time	math	retained
174743401	0	-1.987	1
174743401	1	-1.185	1
174743401	2	-1.446	1
174743401	3	-.297	1
174743401	4	.65	1
179996481	0	-1.83	0
179996481	1	-1.038	0
179996481	2	.114	0
179996481	3	.237	0
179996481	4	1.623	0

math_long.dat example

id	math0	math1	math2	math3	math4	retained
174743401	-1.987	-1.185	-1.446	-.297	.65	1
179996481	-1.83	-1.038	.114	.237	1.623	0
212482581	-1.541	.905	1.485	2.034	2.521	0
212483121	-1.898	-1.054	1.309	1.346	.897	1
212486061	-1.83	-2.33	.995	.811	1.736	0
213951961	-2.778	-1.882	-.928	-.032	1.148	1
224546251	-4.055	-2.657	-1.132	-.403	-.702	1
226167651	-1.218	-1.054	-.316	.632	2.3	0
226168031	-2.778	-2.265	-.316	-.779	1.514	1
226170441	-.619	-.854	-1.03	.237	1.736	0

math_wide.dat example