

## California Growth Trajectory Table and Graph

One of the several advantages of tracking student test scores on a longitudinal scale is the ability to model and observe trends in the growth trajectories. A growth trajectory is simply the shape of the curve formed when fitting consecutive test results for individual students (or groups of students) over time. The following tables and graphs summarize the inter-quartile student growth trajectories beginning at Grade 2 and ending at Grade 8 for math and reading. These growth trajectories were estimated using a logistic equation on the September 2003 and May 2004 Performance Series test data for California.

These tables can be used to track student performance relative to observed performance in the 2003 - 2004 academic year. Each entry in the table represents the inter-quartile range of scores for a particular month and grade level. For example, the Grade 3 November inter-quartile range in mathematics is 2076-2193-2296. This range provides four separate categories for us.

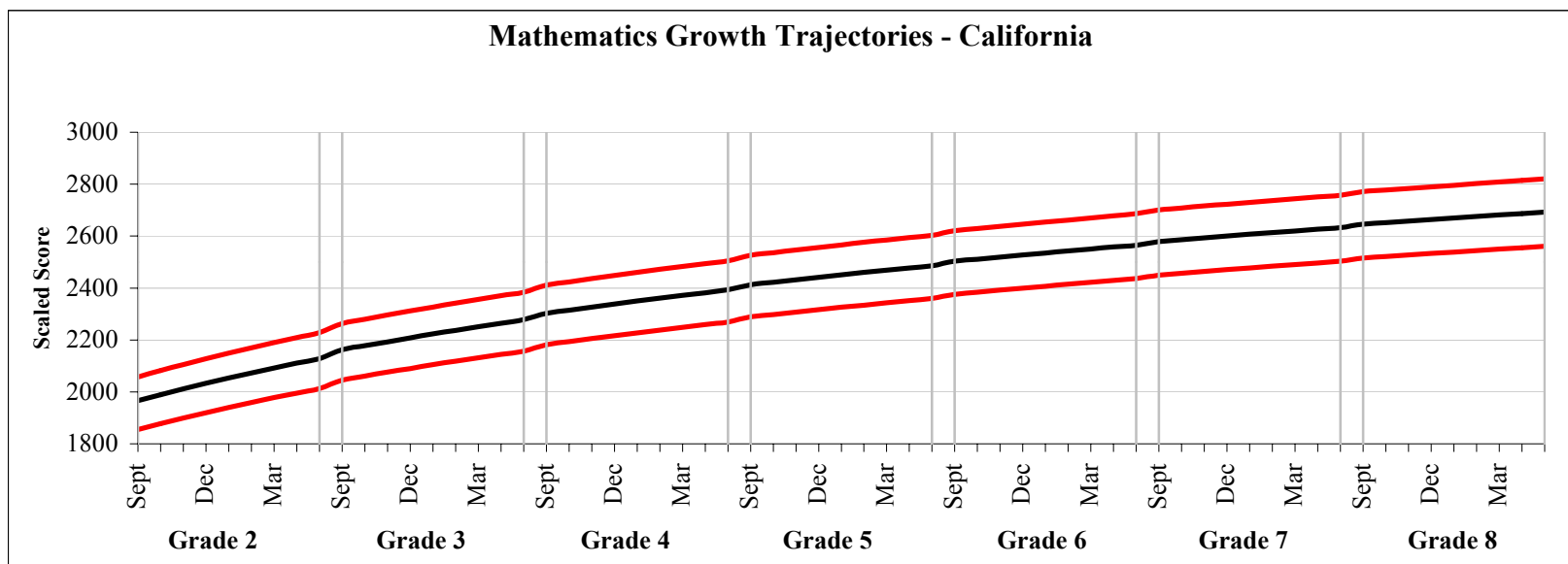
1. Third graders testing in November with a score less than 2076 are scoring **well below average**.
2. Third graders testing in November with a score between 2076-2193 are scoring **below average**.
3. Third graders testing in November with a score between 2193-2296 are scoring **above average**.
4. Third graders testing in November with a score greater than 2296 are scoring **well above average**.

Using these categories, goals can be established for students to move from one category to the next. For example, a student who scores below 2076 (well below average) when he tests in November would strive to increase his score by one or more categories when he tests again in May. His teacher would use the Suggested Learning Objectives to map an individualized learning plan that will help him increase his scaled score and achieve his goal.

The graph measures the growth in learning that is captured by Performance Series scores over time. There are three curves in this graph. The middle black curve represents the growth trajectory for median test scores. The two red curves that are mirroring the median curve represent growth trajectory for the 25<sup>th</sup> and 75<sup>th</sup> ranked test scores. The vertical axis and horizontal axis represents the Performance Series scaled score and point in time across grade levels

**Inter-Quartile Range for Growth Trajectories**  
**Mathematics California**  
**(25<sup>th</sup> – 50<sup>th</sup> – 75<sup>th</sup>)**

Grade	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
2	1855-1966-2057	1878-1989-2082	1899-2012-2105	1920-2033-2128	1940-2054-2149	1959-2073-2170	1978-2092-2190	1995-2111-2209	2013-2128-2228
3	2045-2162-2263	2061-2178-2280	2076-2193-2296	2090-2208-2312	2105-2223-2327	2118-2237-2342	2132-2251-2356	2145-2264-2371	2157-2278-2384
4	2182-2303-2411	2194-2315-2423	2205-2327-2436	2216-2338-2448	2227-2350-2460	2238-2361-2472	2249-2372-2483	2259-2382-2494	2269-2393-2505
5	2289-2413-2526	2298-2422-2536	2307-2432-2546	2317-2441-2556	2326-2451-2566	2334-2460-2576	2343-2469-2585	2352-2477-2594	2360-2486-2603
6	2376-2503-2621	2384-2511-2629	2392-2519-2638	2400-2527-2646	2407-2535-2654	2415-2543-2662	2422-2550-2670	2429-2558-2678	2436-2565-2686
7	2450-2579-2701	2457-2586-2708	2464-2593-2716	2471-2600-2723	2477-2607-2730	2484-2614-2737	2490-2620-2744	2496-2627-2751	2503-2633-2757
8	2515-2646-2771	2521-2652-2777	2527-2658-2784	2533-2664-2790	2538-2670-2796	2544-2676-2802	2550-2682-2808	2555-2687-2814	2561-2693-2820



**Inter-Quartile Range for Growth Trajectories**  
**Reading California**  
**(25<sup>th</sup> – 50<sup>th</sup> – 75<sup>th</sup>)**

Grade	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
2	1550-1775-1999	1585-1809-2032	1619-1842-2063	1651-1874-2093	1682-1904-2122	1711-1933-2150	1740-1961-2177	1767-1988-2202	1794-2014-2227
3	1844-2064-2274	1868-2087-2297	1891-2110-2319	1914-2132-2340	1936-2154-2360	1957-2174-2380	1978-2195-2400	1998-2215-2418	2018-2234-2437
4	2055-2271-2472	2074-2289-2489	2091-2306-2506	2109-2323-2522	2126-2340-2538	2142-2356-2554	2159-2372-2569	2174-2388-2584	2190-2403-2598
5	2220-2433-2626	2235-2447-2640	2249-2461-2654	2263-2475-2667	2277-2489-2680	2291-2502-2693	2304-2515-2705	2317-2528-2717	2330-2541-2730
6	2356-2565-2753	2368-2577-2765	2380-2589-2776	2392-2601-2787	2404-2613-2798	2415-2624-2809	2426-2635-2819	2438-2646-2830	2449-2657-2840
7	2470-2678-2860	2481-2688-2870	2491-2699-2880	2502-2709-2890	2512-2719-2899	2522-2728-2909	2532-2738-2918	2541-2748-2927	2551-2757-2936
8	2570-2776-2954	2579-2785-2962	2588-2794-2971	2597-2803-2979	2606-2811-2988	2615-2820-2996	2624-2829-3004	2632-2837-3012	2641-2845-3020

