ABSTRACT

PUTTING SCIENCE EDUCATION FIRST: AN ALTERNATE
APPROACH TO STATE INTERVENTIONS

by

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No Child Left Behind (NCLB) legislation sets a standard of achievement that has left today’s underperforming schools clamoring to meet Annual Yearly Progress (AYP) targets. By raising heavily weighted English Language Arts (ELA) and Mathematics test scores, Academic Performance Index (API) growth is maximized. Many schools have failed to grow and intervention teams are in place. The State Academic Intervention Team (SAIT) is aimed at ELA and Mathematics. Extra remediation periods in ELA and/or Mathematics leave students without Science. There is no data on the effects of these interventions on Science literacy. Analysis of student Science scores to determine the effects of decreased Science education on Science literacy is recommended. A three year longitudinal study analyzing past data for the 31 SAIT schools in California,
as well as 10 non-SAIT schools with similar school state rankings, should be completed to determine the effects of SAIT intervention on Science education. A curricular adaptation adhering to the same developmental research as the current SAIT process is presented. Curricular integration increases student learning through applicable scaffolding of information. This 6th grade Science unit teaches students standards pertaining to the layers of the Earth, plate tectonics, and convection while incorporating multiple ELA and Mathematics standards through the concept of density. The current state system offers remediation as set by NCLB, but contributes to a scientifically illiterate public which was not what NCLB was designed to accomplish. It is imperative to remediate Language Arts and Mathematics deficiencies. This remediation is feasible through an integrated Science curriculum.