**Title:** “Pawsome” impact of rescued Pooches and Bunnies on homework participation of Oakland inner city Mercado High School during the 2016 school term

**Abstract:** Inner-city children in America’s big cities are exposed to a variety of crimes ranging from property crimes, drugs and gun violence [1] [2]. Inner city schools also show a higher than national average tendency towards negative outcomes such as inability of students to keep pace, incomplete homework, delinquency and school dropout, substance abuse, other risky social behavior [3]. In 2014 at Oakland Unified at the Mercado High School, only 60.5 percent of students entering in 2010 graduated from school [4] as compared to a national average of 83%. On a parallel front, Oakland Animal Services has been forced to euthanize 40% of the animals that come under its care [5] thanks to large abandonment levels, social demographics and local economics.

In 2016, this study set up a after-school homework program at the Mercado High School school wherein the students were encouraged to do their homework or get additional help at school every day. From January to March time frame, attendance in school was steady but unimpressive at 2%. In April 2016, the null hypothesis was proposed was that the presence of pets at the homework session would not influence the participation levels of Mercado High School children. From April to June of 2016, select pooches and bunnies from the local Oakland Animal services were brought in to every homework session. Daily attendance immediately jumped by 22% over the three-month April – June 2016 term and weekly grades showed a 11% increase. The null hypothesis has been rejected and it is likely that animals do play a role with how students attach with homework do in school.

In the April to June 2016 study term, euthanizations of pooches and bunnies decreased to 15% rate. It was observed that more animals were adopted by Mercado School families and past graduates. And overall attendance and graduation rates appear to be improving as well thanks to the increased participation in the homework program. These attributes will be studied in the 2017 school year

**Keywords:** Oakland, Schools, Homework, Pets, Classroom animals

**About the Author:** Natarajan Shankar is the lead data scientist at the City of Oakland (California) Department of Educational and Social Services and is a leading advocate of children and animal welfare. Shankar’s interest in social issues blossomed in 2016 when he joined with a Master’s degree program in Data Science at the University of California, Berkeley. While immersed in the curriculum, Shankar learned the power of data science and its ability to help quantify and measure social issues, link data across multiple independent governmental organizations, and envisioned the ability to derive easy to comprehend mathematical decisions that could be used to influence public policy and spending and eventually benefit society. Shankar is also a software professional with many years of experience developing enterprise class software.

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