For the Project Evaluation Team (PET), Year 1 of the TQE grant was used primarily to establish the overall design of the 5-year grant. Per the U.S. Department of Education’s explicit guidelines, a rigorous research design was created to measure the relationships and effect sizes of the TQE project on student learning from the baseline year of 2004 to 2009 in mathematics and reading at a PK-5 elementary school, a K-5 elementary school, a 6-8 middle school, and a 9-12 high school in Rockford, Illinois public school district #205.

Because intact groups were already formed for the grant, an experimental design was not possible. However, a matched pairs, quasi-experimental design was created to measure the relationship of TQE grant activities on student achievement. The matched pairs were determined based on rank order scores on numerous demographic variables over a five-year time period (i.e., 1999 to 2003), as well as matches on mathematics and reading scores from the Illinois Standards Achievement Test (ISAT), averaged over time for the elementary and middle schools, and three years of scores from the Prairie State Achievement Examination (PSAE) for high schools. These standardized test scores in mathematics and reading are used by the State of Illinois for Yearly Annual Progress (YAP) reporting in accordance with the No Child Left Behind Act.

With a matched pairs design, schools chosen for the control group will not receive teaching, learning, leadership, etc. interventions derived from the TQE project. These schools will continue with their standard curriculum and activities. Because of this, comparisons can be made between the control and experimental schools in the sense that differences between the two groups should relate at some degree to the effect(s) of a particular intervention if the schools being matched have very similar characteristics from
the beginning of the project. This can help alleviate confounding factors from interfering
greatly with the results of the various interventions used in the project.