

*Atmane Ikhlef, PhD, MPH, Qatar University*

## Introduction

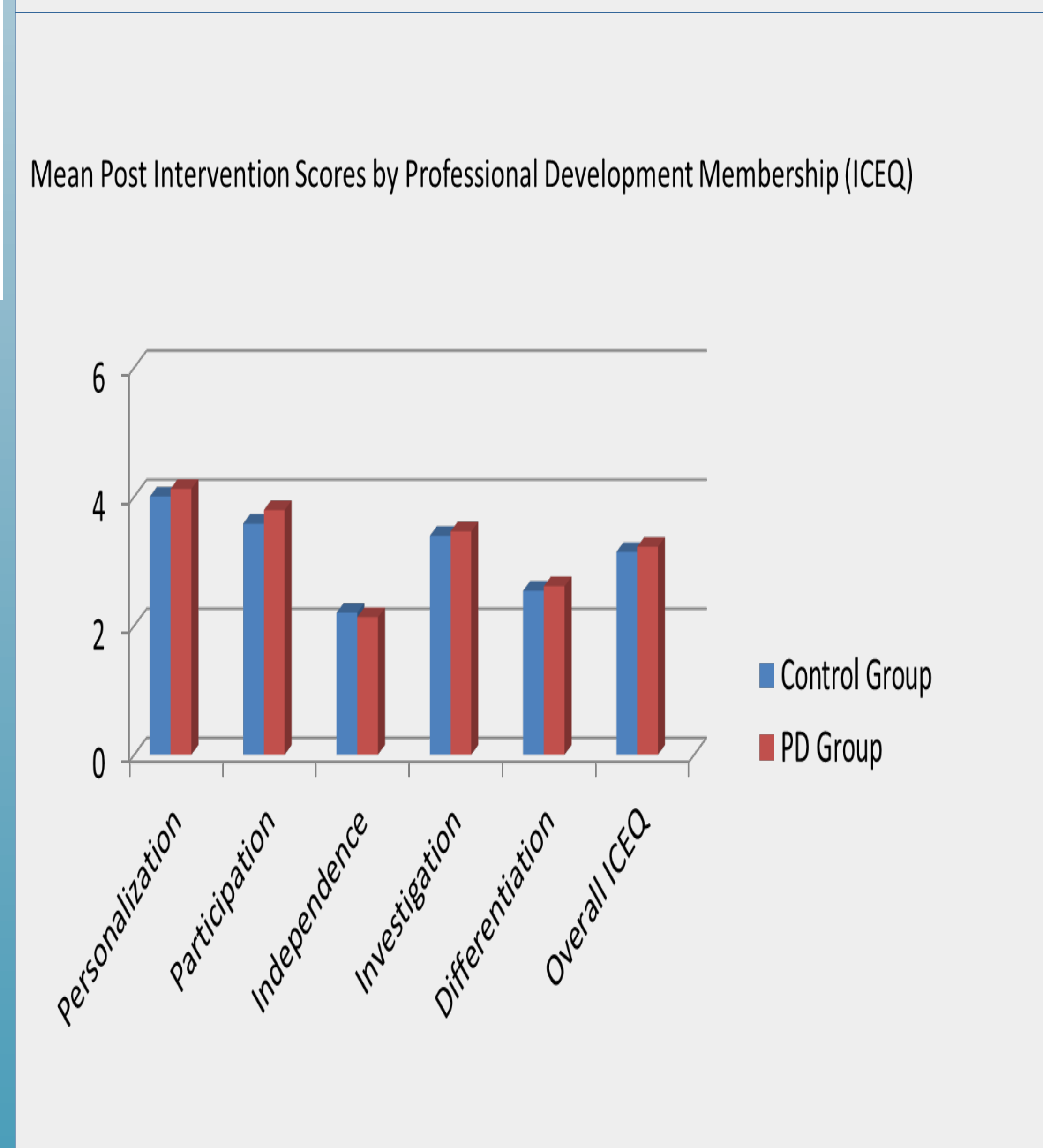
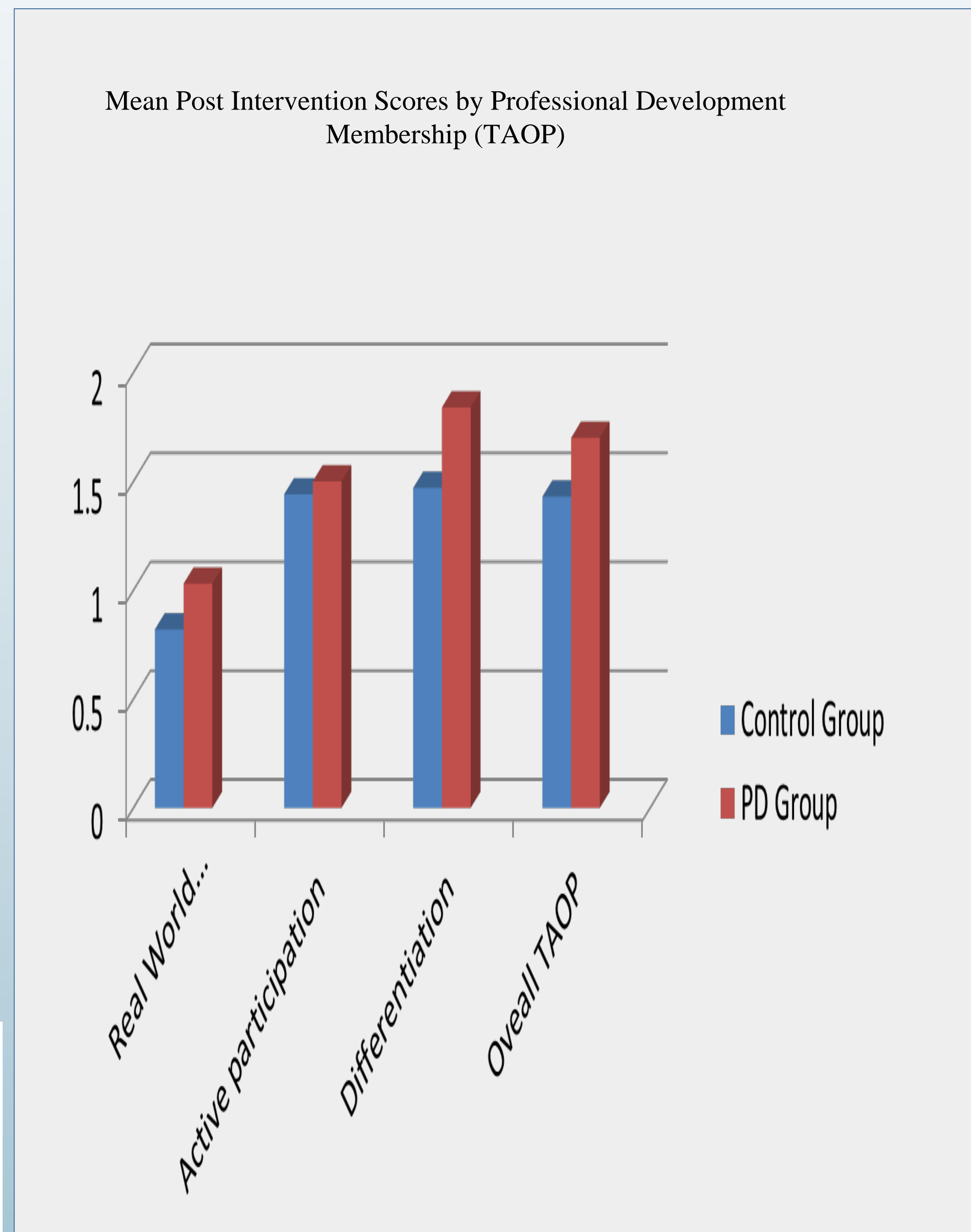
In 2002, Qatar established key elements of educational reform, known as "Education for a New Era", including curriculum standards, emphasis on student-centered classrooms, and extensive professional development for teachers. The present study is a part of a three year QNRF funded research project which involved two major phases. The first phase of the research project was primarily descriptive and depicted the classroom instructional strategies implemented in response to Qatari educational reform goals, The second phase of the research which is the focus of this study was designed to investigate the influence of learner-centered professional development program on learning environment and teaching behaviors..

## Objectives

The purpose of this study was to investigate the differences in teaching behaviors, including the learning environment, of teachers who participated in the professional development program and those who did not. More specifically the research question was: Are there differences in teaching behaviors as a result of participation in the professional development program ?

## Methods

This study employed a quasi-experimental design to investigate the influence of specifically designed professional development modules, which were developed based on the initial baseline data, targeting improvement of student-centered instructional strategies (Real World Applications, Active participation, and Differentiation in strategies and curriculum). Data for the current study were collected in 17 schools randomly selected from 46 schools. Three to five third and fourth grade math and science classrooms were randomly selected from these schools for participation. The present study sample consisted of 47 teachers.



## Data Collection Instruments

- Teacher Attributes Observation Protocol (TAOP) Consisting of Real World Applications scale; Active Participation scale; Differentiation in Strategies and Curriculum as measures of Student-centered Teaching Behaviors. The Individualized Classroom Environment Questionnaire (ICEQ). Teaching Efficacy Scale (TES).

## Results & Discussion

- Findings indicate that the overall mean of the TAOP (teaching behaviors) was higher for the teachers who participated in the professional development (PD) seminars, but there were no significant statistical differences between the two groups ( $F(1, 36)=.914, P<.35; \eta^2=.025$ ).
- Means of all the TAOP subscales were in favor of the professional development group which tends to suggest that teachers in the PD program were able to implement student-centered instructional strategies and impact student learning.
- For the ICEQ significant differences emerged by group membership (Manova  $F(1,31)=5.95; p<.0001$  for all variables). The PD group significantly increased from pre to post, this may reflect gains in self-regulation, a building block in student-centered teaching and learning.
- For the TES (Teaching Efficacy Scale), the PD group increased from pre to post intervention although the difference is not statistically significant.

## Conclusions

- The findings from this study have implications for the implementation of reform in Qatar in general and professional development in particular.
- Next steps might include design and implementation of targeted professional development programs that go beyond general awareness of appropriate student-centered instructional strategies and includes intensive practice and coaching with feedback.