* ***Characterizing Noyce Scholars' Classrooms with RTOP***
* **PST2B03**
* Mon 01/06, 9:15PM - 10:00PM
* by Kathleen Falconer
* Type: Poster
* In 2009, we proposed a renewal and extension of the Robert Noyce Teacher Scholarship Program at Buffalo State College to support an additional 35 scholars seeking initial science and mathematics teacher certification over the next five years. As a component of the Phase 2 Teacher Scholarships Project at Buffalo State College: Science, Technology, Engineering and Mathematics (STEM) Teacher Effectiveness Study, we included research and evaluation of the Noyce participants. Several Noyce scholars, in their first few years of teaching, have been observed and evaluated using the Reformed Teaching Observation Protocol (RTOP). We will be reporting on the results from several classrooms. **Hide description**
* ***SUNY Buffalo State Summer Physics Teachers' Academy: The First Decade***
* **PST2B07**
* Tue 01/06, 9:15PM - 10:00PM
* by Alyssa Cederman
* Type: Poster
* The SUNY Buffalo State Summer Physics Teachers' Academy, partially modeledafter the Arizona State University Summer Modeling workshops, has run since summer 2002, serving more than 400 individual teachers seeking NYSED physics certification, including over 100 M.S.Ed. (Physics) degree graduates and candidates from the Buffalo State Physics Department. Each summer between two and five graduate credit teacher workshop courses have been offered, serving as many as 30 students per class. We share demographic data, insights, and experiences from the first decade of our summer academy, including recommendations and pitfalls for others interested in creating summer academies for physics teachers. **Hide description**
* ***Merging Engineering Design, Technology and Physics for K-12 Teachers***
* **PST2B09**
* Mon 01/06, 9:15PM - 10:00PM
* by Dan MacIsaac
* Type: Poster
* We describe efforts of the Interdisciplinary Science and Engineering Partnership (ISEP), a $10M NSF Math Science Partnership supported project involving SUNY at Buffalo (UB), Buffalo Public Schools, Buffalo State College, the Buffalo Museum of Science, PraxAir Corp and other partnering education institutions and corporate partners. This poster focuses on the creation of specific courses combining Engineering Design, Technology and Physics content addressing NGSS standards for K-12 teachers. These courses are offered as part of the SUNY Buffalo State Summer Physics Teachers' Academy. **Hide description**
* ***Whiteboarding in Conceptual Physics: Evidence From a First Year Experience\****
* **PST2E01**
* Mon 01/06, 8:30PM - 9:15PM
* by Bradley Gearhart
* Type: Poster
* During the 2012-2013 school year, Riverside High School, a persistently low achieving school in the Buffalo Public School District (Buffalo, NY), launched their first offering of Conceptual Physics to support the a new Health Science Academy within the school. Two teachers integrated whiteboarding into three sections of Conceptual Physics. Despite chronic absenteeism, high levels of initial student apathy, a preponderance of ESL students, and extraordinarily diverse student demographics, whiteboards demonstrated profound levels of student thinking and highly varied interpretations of shared evidence not typically associated with students in low performing urban schools. Evidence gathered from student whiteboards demonstrated cognitive interaction beyond that typically reflected on high stakes standardized testing for this student population. **Hide description**