After Installation: Ubiquitous Computing and High School Science in Three Experienced

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Summary

Full title: After Installation: Ubiquitous Computing and High School Science in Three Experienced, High-Technology Schools

There are few studies of the impact of ubiquitous computing on high school science, and the majority of studies of ubiquitous computing report on the first period of implementation. The present study presents data on 3 high schools with carefully elaborated ubiquitous computing systems, who have gone through at least one "obsolescence cycle" and are therefore several years past first implementation. Data shows how the affordances of 1:1, wireless environment are being deployed in these science classrooms, and the effects of the environment on science content, data analysis, labs and other uses for visualizations, and classroom interaction. While some positive effects are clearly seen in these classrooms, even 5 years or more into the innovation, problems remain, and school cultural factors seem to play an important role in teacher uptake and integration of the technology. Implications for teacher learning are discussed.