

A STUDY OF THE APPLICATION OF EMERGING TECHNOLOGY:  
TEACHER AND STUDENT PERCEPTIONS OF THE IMPACT OF  
ONE-TO-ONE LAPTOP COMPUTER ACCESS

A Dissertation by

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## ABSTRACT

The purpose of this study was to describe and identify Sedgwick High School's teacher and student perceptions of the impact of one-to-one laptop computer access using an appreciative inquiry theoretical research perspective and the theoretical frameworks of change and paradigm shift. An appreciative inquiry theoretical research perspective was used to structure a qualitative, embedded descriptive case study design. An embedded case study design was used to describe the perceptions of high school teachers and their students who were involved in a one-to-one laptop computer wireless environment on student learning and how teachers teach. Data were collected through teacher and student focus groups, as well as administration of the Left-Hand Right-Hand Column Case Method. Data were analyzed using the comparative analysis matrix method (Miles & Huberman, 1994).

The analyzed data revealed six salient findings: (1) Students functioned in the capacity of teacher, (2) technology changed the way teachers and students communicated, (3) the culture of the classroom dynamics between teacher and student changed, (4) technology made learning enjoyable for students, (5) teachers and students believed immersion in a technology-rich learning environment created advantages for student success after high school graduation, and (6) teachers believed that access to ubiquitous technology created new challenges for maintaining student engagement in the learning process.

Five of the six findings suggested that technology had changed teaching and learning, and helped to create a paradigm shift in the teacher and student roles. Additionally, those findings also identified the positive core of Sedgwick High School,

serving to describe the life giving forces within the organization. One of the six findings revealed challenges associated with the application of emerging technology in the classroom.

The findings from this study have the potential to contribute to areas of study that focus on the use of technology in schools. Moreover, research from this study has the potential to help serve as a foundation for other school leaders who are seeking opportunities that prepare students for life in the technology-rich 21st Century through one-to-one laptop computer access.