IMPROVING STUDENT ENGAGEMENT WITH UNIVERSAL DESIGN FOR
LEARNING: A COMPARISON OF TECHNOLOGY AND NON-TECHNOLOGY
BASED INTERVENTIONS

A Dissertation

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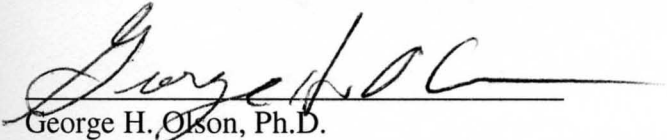
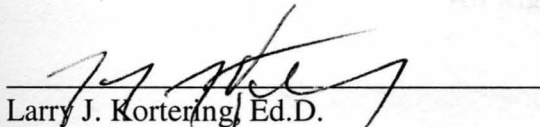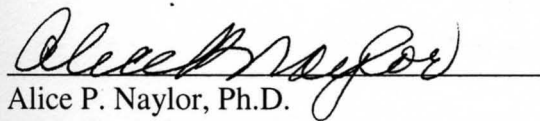TERRY WAYNE MCCLANNON

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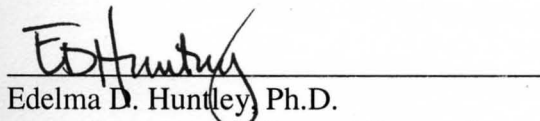Richard E. Riedl, Ph.D.
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ABSTRACT

IMPROVING STUDENT ENGAGEMENT WITH UNIVERSAL DESIGN FOR

LEARNING: A COMPARISON OF TECHNOLOGY AND NON-TECHNOLOGY

BASED INTERVENTIONS. (December, 2006)

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The student dropout rate in the United States is alarming. Approximately one-third of students fail to complete high school each year. Dropouts are struggling to find stable employment in fiercely competitive and technologically advanced labor markets. Relegated to low-paying and unstable employment, many dropouts require public assistance and often become involved in criminal activity.

Research indicates that student engagement is the heart of the school completion problem. Students often site being bored or disengaged with school as reasons to drop out. A recent concept that addresses student engagement and access for all students to the curriculum is Universal Design for Learning (UDL). The primary goal of UDL is to provide students with multiple means of presentation, expression, engagement to the curriculum. UDL utilizes the flexibility of digital technologies to provide engagement and access to the curriculum.

The purpose of this study was to examine students' perceptions of non-technology

and technology based UDL interventions as they related to their perceived student engagement. Teachers from two demographically similar high schools in Western North Carolina (School A and School B) were provided with workshops on the concepts and integration of UDL to teachers. Although technology was not a requirement for these interventions, its use was encouraged. Upon the completion of UDL interventions in their classes participating teachers administered the Student Self-reported Engagement Scale (SSES) to assess students' perceived engagement for the activity. A total of 290 students were exposed to UDL interventions and accounted for over 4,000 responses. Additional qualitative data were collected to add further insight to the quantitative results.

Initial results revealed that School B did not have an effect on student engagement due to limited participation. Therefore, School B was dropped from further analyses. The preliminary analyses of perceived student engagement between non-technology and technology based interventions were found to be significant $p = .026$. Contrary to the initial hypothesis that technology had a positive effect on student engagement, the non-technology interventions were found to be the significant factor. However, the effect size was found to be negligible. Implications and future research as a result of these findings are noted.