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PREDICTING ONLINE SUCCESS: THE RELATIONSHIP BETWEEN HIGH
SCHOOL STUDENT CHARACTERISTICS AND SUCCESS IN ONLINE COURSES

A Dissertation by

MICHAEL JAMES SCHRAMM

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August, 2006

Approved by:



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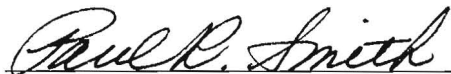
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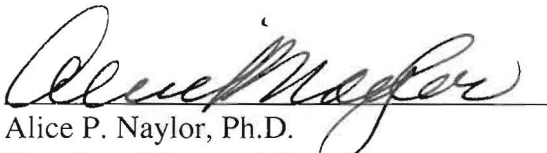
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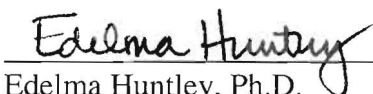
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ABSTRACT

PREDICTING ONLINE SUCCESS: THE RELATIONSHIP BETWEEN HIGH SCHOOL STUDENT CHARACTERISTICS AND SUCCESS IN ONLINE COURSES

(August 2006)

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This study examined the relationship between cognitive and demographic attributes of online high school students and their performance in online courses. The research drew on the findings of Roblyer and Marshall (2002) and used their Educational Success Prediction Instrument (ESPRI), a 70-item questionnaire designed to discriminate between successful and unsuccessful online high school students. The research questions addressed (a) whether the ESPRI discriminates between successful and unsuccessful online high school students, (b) whether factors measured by the ESPRI are related to success in online courses, and (c) whether demographic and personal characteristics measured by the ESPRI are related to success in online courses. The ESPRI was administered online to 249 Arkansas Virtual High School students. A logistic regression analysis was conducted on Roblyer and Marshall's four-factor solution and a subsequent factor analysis yielded a five-factor model, which was also tested with logistic regression. Chi-square tests and an independent samples *t*-test were employed to identify differences

between successful and unsuccessful students on student characteristics. The results did not corroborate Roblyer and Marshall's (2002) findings that the factor solutions were able to discriminate between successful and unsuccessful online students; neither of the factor models predicted overall performance beyond 58% accuracy. However, when student characteristics were combined with ESPRI items in a logistic regression analysis, 81% of the cases were accurately classified. Furthermore, the results revealed significant associations between online course performance and (a) grade level, (b) outside school commitments, and (c) enrollment in elective courses. Further research with the ESPRI is called for in order to make the instrument a more useful tool for educators working with online high school students.