

BOSTON COLLEGE
Lynch Graduate School of Education

The dissertation of

Jonathan G. Way

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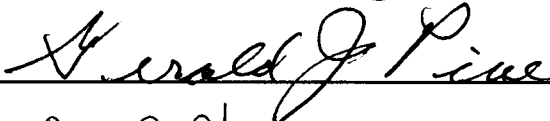
ASSESSING STUDENT LEARNING AND INTEREST IN EASTERN COYOTES

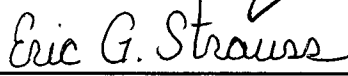
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Department of
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Program
Curriculum and Instruction

ASSESSING STUDENT LEARNING AND INTEREST IN EASTERN COYOTES

Dissertation

by

JONATHAN G. WAY

submitted in partial fulfillment of the requirements

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Assessing student learning and interest in eastern coyotes

By Jonathan G. Way

Advisor: Michael Barnett

Abstract

This study used a mixed methodological (qualitative – quantitative) framework to examine student learning and interest in a curriculum unit based on eastern coyotes. There have been few previous studies that have examined student learning of animal behavior. I studied the students from two urban environmentally-based high school science courses in the Boston area. Both classroom interventions showed meaningful learning and affective gains from before to after the curriculum unit. The coyote curriculum unit described in this dissertation was successful because it was designed from a local, place-based study, it was authentic in the students' eyes, it used a diverse array of teaching tools to maintain student interest and to encourage their learning and beliefs about coyotes, and it involved a trained scientist teaching the unit. The videos that accompanied the unit were very important in simulating an authentic experience for the students; in other words, they illustrated the unit and provided students with an intermediate vision between text and lecture and the real thing (e.g., coyotes). Place-based activities overwhelmingly show that students can be empowered to care for their surroundings when they are interested and encouraged to do so. Coyotes could potentially be used as a flagship or charismatic species to trigger an increased interest in science and environmental education and the environment near where people live.

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research purposes, I was still able to use them in this dissertation because of them being housed at the Stone Zoo.

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Dedication

To my grandmother, Ann Rosenfield, who passed only months prior towards reaching her final goal in life, which was to see me earn my doctoral degree. Nana, I know you are there in spirits. We all miss you!