

## Public Abstract

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Fidelity of implementation (FOI) is the extent to which a program is implemented as designed. There needs to be more work on conceptualizing and measuring FOI in conservation education programs. There also needs to be a better understanding of how conservation education programs affect variables important to intended stewardship behaviors. I evaluated the Discover Nature Schools (DNS) program, a pre-K-12 conservation education curriculum developed by the Missouri Department of Conservation (MDC), using a case study approach that included teacher focus groups, an intensive classroom study, and a statewide teacher survey to answer the following research questions:

*What is the Fidelity of Implementation of the DNS program?*

*How are variables important to intended stewardship behaviors affected by participation in the DNS program?*

*How does Fidelity of Implementation influence variables important to intended stewardship?*

*What variables predict Fidelity of Implementation of the DNS program?*

I found that DNS does a good job of teaching content, although there were mixed results for teaching scientific inquiry. Teaching students outside increased students' environmental sensitivity and self-assessed knowledge of behaviors to help wildlife, regardless of whether or not students were in the DNS or comparison classrooms. Teachers generally had positive things to say about the DNS program. Teachers had varying levels of implementation of DNS, with few teachers saying they taught DNS "by the book." Institutional barriers, alignment of DNS with academic standards, outside support, and challenges teaching lessons outdoors affected FOI. The amount of instructional time, teacher content knowledge, school district support, and support from MDC predicted FOI. The DNS program had some components of FOI, such as teaching outside, that were not included in the operationalization of FOI of general math and science curricula. I also found there is not a straightforward relationship between FOI and outcomes for the DNS program. For example, having more lessons outside was associated with increases in environmental sensitivity. However, FOI was not related to pre-/post-unit changes in ecological knowledge. I recommend further study, including refining how FOI is defined and measured, of FOI in conservation education programs.