

OUTSIDE

Over, Under, and Through: Students Informally Discover the Environment



DRL-1224051

Project Goals:

Train naturalists and capture patterns in interactions among participants, mobile technology, and nature.

Partners



Research Questions

- How is technology used as a scaffold to help students interact with nature?
- In what ways do students interact with naturalists, nature, and mobile technology supplements while participating in OUTSIDE?
- What are participants' environmental science and awareness learning gains after participation?

Outcomes

iPad use encouraged interactions with nature through activities
 Students relied on iPads less as they went outside more often
 Students were engaged and excited to participate
 Naturalists were positive about using iPads as a resource
 Environmental awareness and content learning improved

Audience

- Middle School Students
 Volunteer Naturalists
- Undergraduates
 - Graduate Students
 - General Public

GO to Lake Thoreau App

Multiple Hike Options & Related Resources

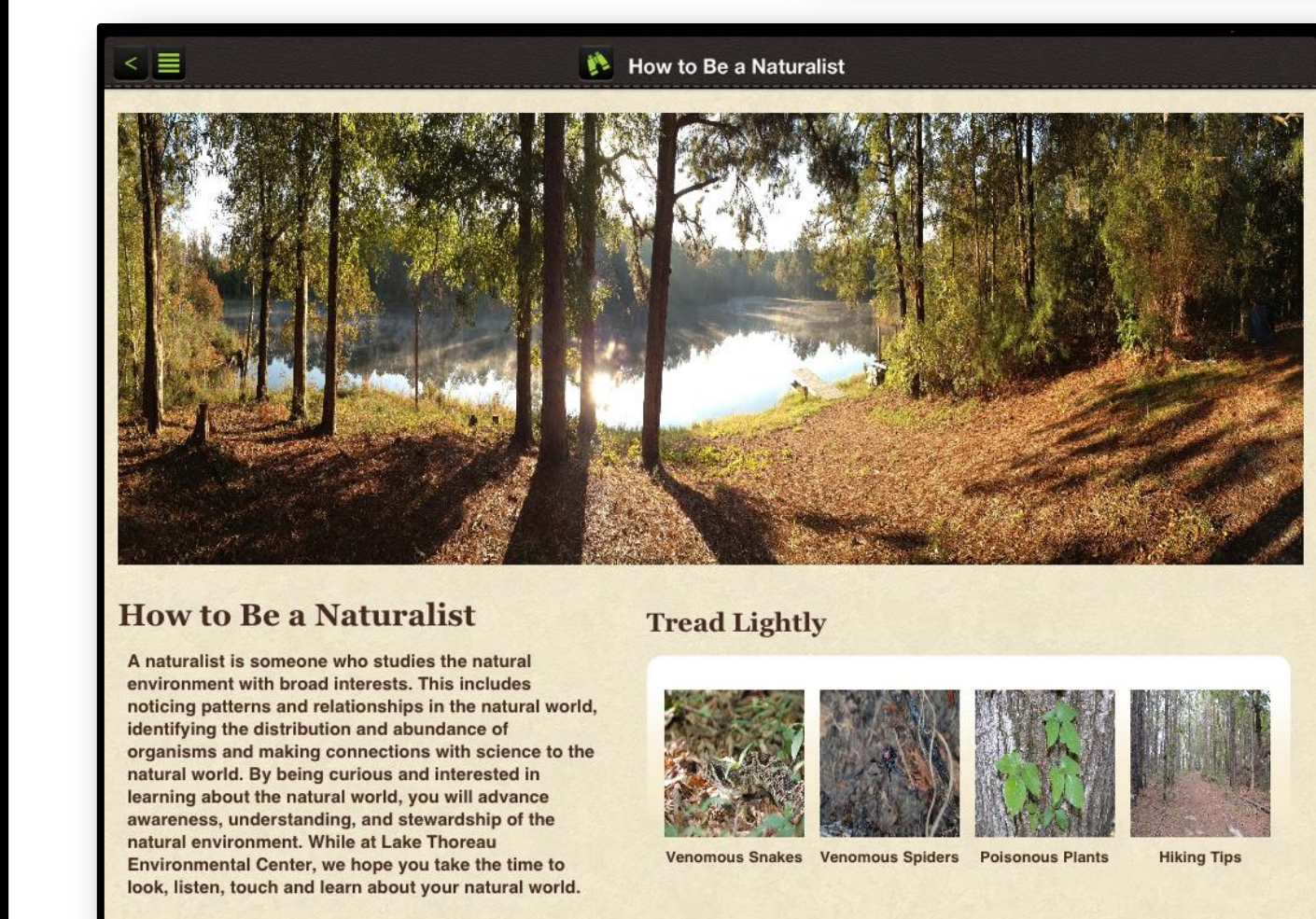
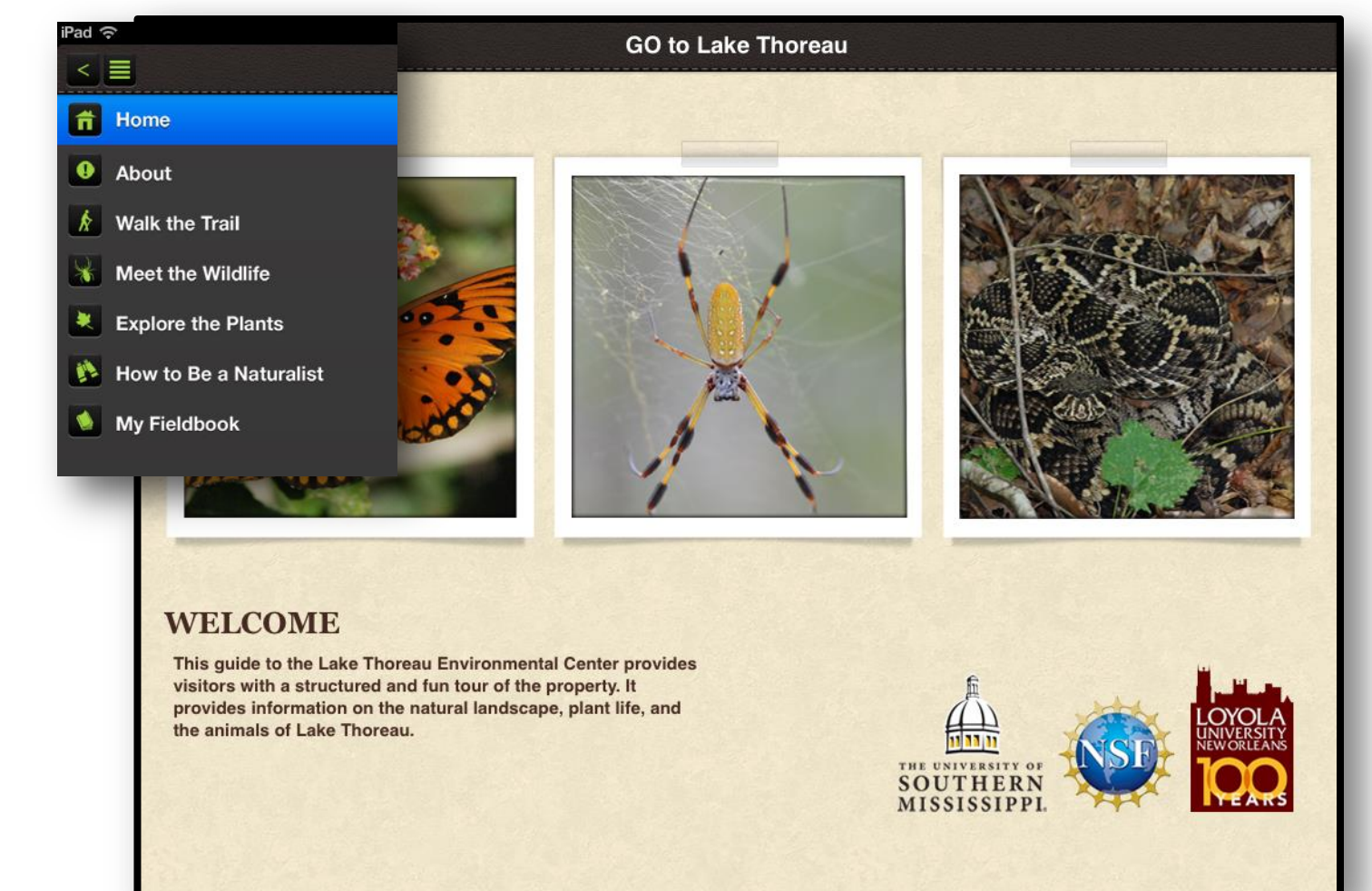
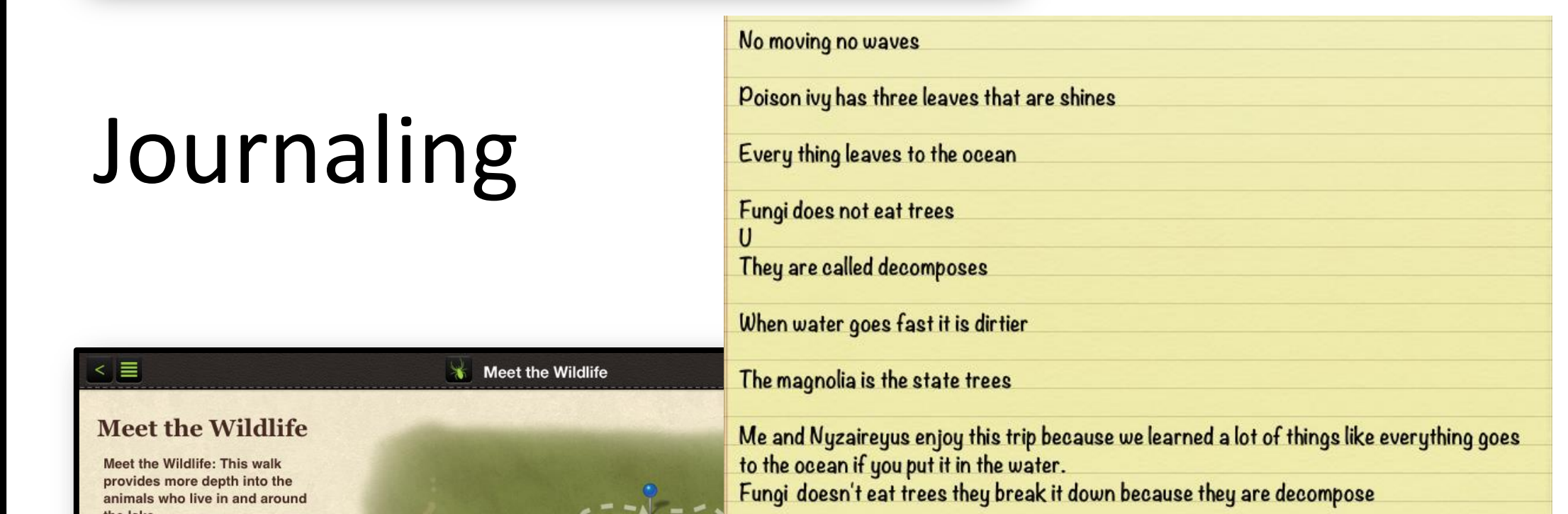
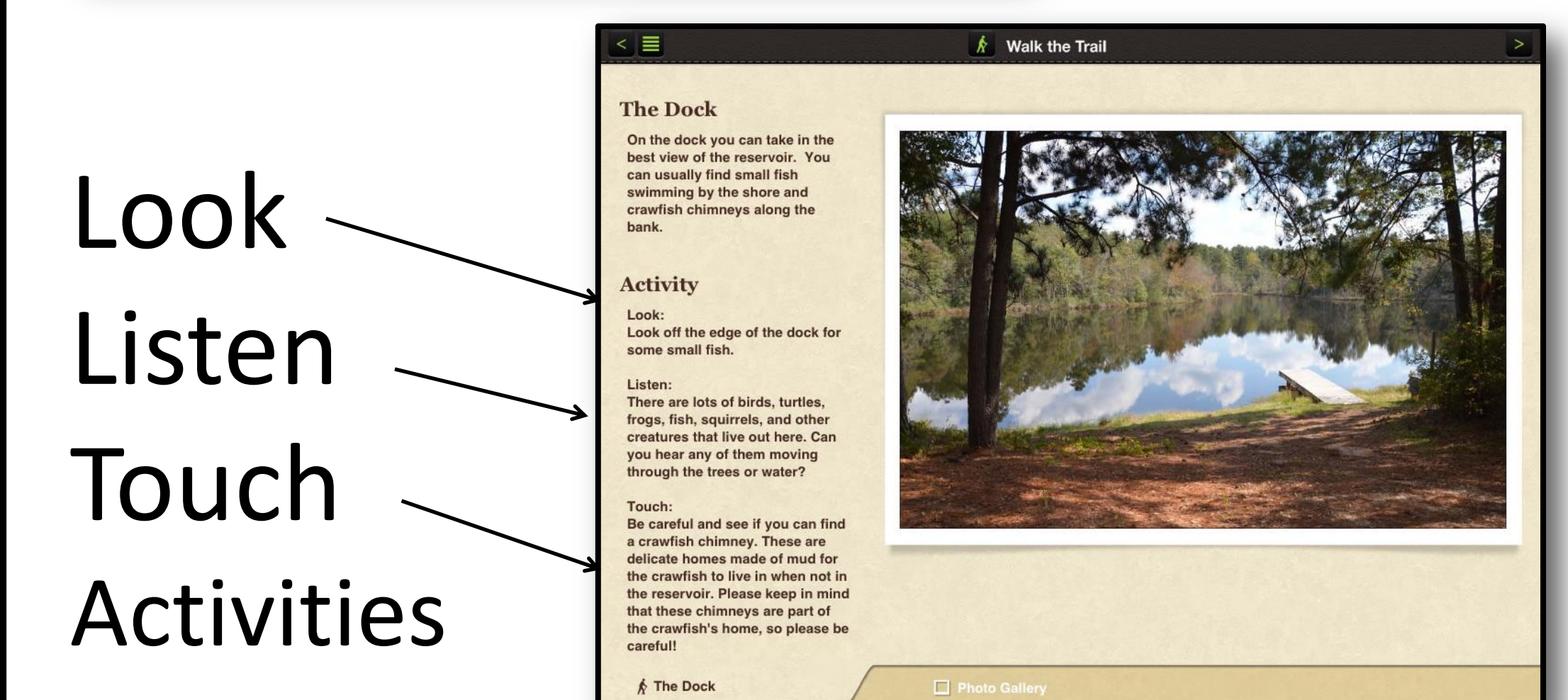


Photo Galleries & Science Content



Map of Stations



Look Listen Touch Activities



Challenges

Solutions

Student Motivation	We developed an iPad 'hook' to motivate student participation in hikes We provided free naturalist training
High Attrition	We followed multiple key informants across semesters to ensure a minimum sample size post attrition
Communication	Our research team held weekly meetings to share progress reports and determine new action plans We set up a project email address and maintained regular contact with school teachers and the school district
Instruments	We modified and replaced instruments as needed to ensure validity, reliability, and trustworthiness of our data We used multiple researchers to triangulate findings



<http://www.usm.edu/get-outside>

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