

Natural settings, particularly forests, are very important in this regard, as are the lakes and ponds found in the Arboretum. Paths that lead through diverse environments may enhance the experience of variety, which is also an important aspect of people's experience of the Arboretum.

The prominence of serenity as a quality in people's explanations of their preferred settings is consistent with Ulrich's (1981) research on the relaxation-inducing qualities of vegetation in landscapes. Many respondents viewed the Morton Arboretum as a place of refuge, where they could escape from daily routine and urban hassles to find solitude, because its controlled entry and exclusion of more active recreation greatly reduces the safety concerns and the noise that can intrude on solitude in urban outdoor recreation sites. Serenity, refuge, and solitude can be provided in areas away from roads and congestion, by inconspicuous trails leading to cool, shaded places near lakes or ponds.

A final recommendation concerns the fact that preferences varied significantly among different people in this study. Most of the participants liked natural woods the most, but several people preferred more formally landscaped settings. People also varied considerably in how much they liked open, natural meadows. By providing a variety of natural and landscaped settings with varying densities of vegetation, an arboretum can appeal to a public with diverse landscape preferences.

References

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"The Field Trip Milieu: Learning and Behavior as a Function of Contextual Events"

J. Falk & J. Balling (1982). *Journal of Educational Research*, 76(1), 22-28.

This study is part of a series by Falk and his colleagues which examined children's experiences on school field trips, especially the effects of novel environments.

The attitudes, behavior, and learning of third and fifth graders were compared in two environments: (1) a field trip to a nature center to learn about tree biology; and (2) the same lesson given at school outside the students' classroom. The 196 students in this study were divided equally between third and fifth graders; 46 girls and 52 boys from the fifth grade, and 44 girls and 54 boys from the third grade.

The following measures were used: a pretest, posttest measure of knowledge (both multiple-choice and completions items); direct observation during the instruction; and self-report items to measure attitudes.

Results

Cognitive Learning Measures

1. Fifth grade students scored higher on the tests than third graders.
2. All groups showed an increase in performance from pretest to posttest.
3. Third grade students performed higher in the school setting, while the fifth grade students performed higher in the nature center environment.
4. Fifth grade girls in the nature center group performed better on the retention test than all other groups.

Behavioral Data

1. Students spent most of their time on-task.
2. Third graders were more on-task in the school setting, while fifth graders were more on-task at the nature center.

Affective Data

1. Over half the students (56.2%) thought the forest was the best place to learn about trees, with greenhouse (13.4%) and classroom (10.8%) next.
2. Over 80% preferred the field trip.

The study demonstrates that the general environment and the grade level of students are both important factors to consider in learning situations. The authors suggest a curvilinear model that shows the relationship between learning, setting novelty, and off-task behavior.