

**Chapter 1 : Natural Frontier Market Ditmars Blvd Astoria, NY Grocery Stores - MapQuest**

*Nutritional Frontiers is breaking through nutritional boundaries to provide the most comprehensive, researched and therapeutic natural solutions for patients today! The "new frontier in nutrition" maximizes synergy with the latest technology in manufacturing with the highest quality control standards, cutting edge unique formulations, and patient friendly educational programs.*

This study tested the hypothesis that lessons in nature have positive—not negative—aftereffects on subsequent classroom engagement. Using carefully matched pairs of lessons one in a relatively natural outdoor setting and one indoors, we observed subsequent classroom engagement during an indoor instructional period, replicating these comparisons over 10 different topics and weeks in the school year, in each of two third grade classrooms. Pairs were roughly balanced in how often the outdoor lesson preceded or followed the classroom lesson. Classroom engagement was significantly better after lessons in nature than after their matched counterparts for four of the five measures developed for this study: This nature advantage held across different teachers and held equally over the initial and final 5 weeks of lessons. And the magnitude of the advantage was large. In 48 out of paired comparisons, the nature lesson was a full standard deviation better than its classroom counterpart; in 20 of the 48, the nature lesson was over two standard deviations better. Because the pairs of lessons were matched on teacher, class students and classroom, topic, teaching style, week of the semester, and time of day, the advantage of the nature-based lessons could not be attributed to any of these factors. It appears that, far from leaving students too keyed up to concentrate afterward, lessons in nature may actually leave students more able to engage in the next lesson, even as students are also learning the material at hand.

**Introduction** When teachers offer lessons in relatively natural settings, students may benefit in a number of important ways. Lessons in nature may also offer other benefits associated with exposure to trees, gardens, parks, and wildlife, including physical activity, stress relief, and the rejuvenation of attention for reviews see Chawla, ; Kuo, Furthermore, as anthropogenic climate change becomes an increasingly pressing issue, lessons in nature may help build the next generation of environmental stewards; positive childhood nature experiences appear to play a key role in fostering pro-environmental behavior in adulthood Monroe, Perhaps in response to these important potential benefits, many European countries are incorporating lessons in nature in their formal schooling Bentsen and Jensen, ; in the U. One reason lessons in nature have not caught on in the U. In the context of high-stakes testing, even temporary losses in classroom engagement are an important concern. Classroom engagement—the extent to which students are on-task and paying attention to the material or activity at hand—is both easily disrupted and a major driver of learning and academic success Godwin et al. Do lessons in nature impair subsequent classroom engagement? Our review of the environmental psychology literature suggests quite the opposite. Although we found no studies directly addressing this question, the indirect evidence suggests that classroom engagement will be enhanced, not impaired, immediately after lessons in nature. Specifically, spending time in relatively natural outdoor settings has a number of positive, immediate aftereffects on individuals, each of which is likely to enhance classroom engagement. Moreover, multiple studies have found that schools with greener, more vegetated surroundings perform better academically—even when socioeconomic factors are taken into account Kuo et al. Here we review the evidence on acute doses of contact with nature and their effects on cognitive functioning, interest in learning, and stress, as well as the literature tying greener schools with better academic achievement. Attention is an important resource in student engagement Pekrun and Linnenbrink-Garcia, Acute doses of nature, whether through a window view of a tree-lined street or a walk in a park, have positive aftereffects on attention and working memory. Experimental work has demonstrated these aftereffects for classroom window views of greenery vs. Motivation is a similarly important resource in student engagement Deci et al. Although we found no studies examining aftereffects of acute doses of nature, children prefer and enjoy lessons outdoors over lessons indoors Mygind, ; Wistoft, , and there is some indication that outdoor nature-based learning fosters greater interest in school and learning generally e. Collectively, this body of work suggests nature-based instruction makes learning more interesting and enjoyable; might the interest and positive affect

from a lesson in nature carry over to the next, indoor lesson, resulting in greater classroom engagement? Stress is likely to be another important negative factor in student engagement; high levels of stress consistently predict lower levels of academic achievement e. Experimental work in adults with physiological indicators shows that contact with nature offers quick and powerful reductions in stress biomarkers e. Contact with nature has been tied to lower levels of both self-reported and physiological measures of stress in multiple studies with children Bell and Dymont, ; Chawla, ; Wiens et al. Recently an experimental study involving high school students showed that even a mere window view of vegetation from a classroom yields systematic decreases in both heart rate and self-reported stress, whereas a classroom without windows does not Li and Sullivan, Further, students learning in a forest setting one day a week showed healthier diurnal rhythms in the stress hormone cortisol in that setting than a comparison group that did not receive outdoor learningâ€”and these effects could not be attributed to the physical activity associated with learning outdoors Dettweiler et al. Not only is contact with nature tied to important factors in classroom engagement, but greener schools and classrooms have been tied to better academic achievement. Multi-year assessments of greenness around Massachusetts public schools found positive correlations between greenness and standardized test scores, even after adjusting for income and other confounding factors, although not for all seasons of the year Wu et al. Similarly, standardized test performance in 3rd through 9th graders was higher for District of Columbia public schoolyards with higher levels of tree cover, even after similar controls Kweon et al. More recently, standardized test scores have been tied to schoolyard tree cover in over public schools in Chicago, again controlling for socioeconomic and other factors Kuo et al. While these studies do not directly connect nature exposure with increased classroom engagement, they are consistent with this possibility; indeed, it is difficult to imagine how contact with nature could boost academic achievement while reducing classroom engagement. Thus, exposure to nature has been tied to both the antecedents and the consequences of classroom engagement. Additional converging evidence comes from research in educational psychology not focused specifically on greenness. Generally speaking, time spent out of the classroom and in relatively natural outdoor settings is positive. Studies document a the rejuvenating effects of recess e. All these lines of investigation lend indirect support for the hypothesis that lessons in nature might enhance subsequent classroom engagement. At the same time, it must be acknowledged that the question here differs importantly from those lines of investigation. This study differs from the research on the benefits of recess and physical activity in that the intervention involves formal instructionâ€”teacher-led, formal lessons, delivered as part of a larger curriculum, with all the rules against student socializing and autonomous activity typical of classroom-based lessons. Similarly, unlike most education outside the classroom EotC studies and the study of garden-based learning, this study holds pedagogical approach constant in comparing lessons in nature vs. That is, in most EotC studies, the instruction outside the classroom is designed to take advantage of the setting; as a consequence, the experimental condition differs from the control in two waysâ€”in setting outside vs. In this study, pedagogical approach was held constant across conditions; the lessons inside and outside the classroom differed in setting but not instructional approach. In sum, although it appears no study has directly examined the aftereffects of lessons in nature on classroom engagement, considerable evidence in both environmental psychology and education research points to time spent in natural outdoor settings as having positive impacts. In this study, we hypothesize that lessons in nature have positive, immediate aftereffects on classroom engagementâ€”that is, we expect that when children learn outdoors, their classroom engagement after returning indoors is better than it would have been had they stayed inside the entire time. To test this hypothesis, we compared classroom engagement after a teacher gave her students a lesson in nature vs. Written consent from parents of involved students was obtained prior to the study. The indoor condition in this study comprised two typical classrooms Figure 1 ; although they are not shown in the photo, both classrooms had windows. The outdoor condition comprised a small grassy area just outside the school Figure 2. This instructional area was adjacent to a stream and woodlands, not used in the lesson. While the teacher was setting up the outdoor lesson, students occasionally visited the stream bank briefly. The two classrooms A,B used for indoor instruction in this study. The site of the lessons in nature A and the route students took between their classroom and the outdoor lessons B. The road in the pictures was used exclusively for

pedestrian traffic and infrequently for maintenance vehicles. The two teachers in this study were highly experienced and state-certified in elementary education, with Masters in Education degrees and in-service training in outdoor and environmental education. These teachers had teamed together in lesson planning over a period of 5 years prior to this study, facilitating their coordination of lessons during this study. The students in the classrooms were in third grade. Their age range was 9–10 years old.

**Design and Procedure** At base, this study involved a mini-experiment replicated 20 times. In each mini-experiment, we examined classroom engagement after a lesson in nature vs. This mini-experiment was repeated across 10 different lesson topics and weeks one topic per week, in each of two classrooms. Figure 3 schematically depicts a mini-experiment—the fundamental unit of comparison in this study. Both the experimental condition the lesson in nature and the control condition the lesson in the classroom were 40 min long, and the observation period for both conditions was 20 min long. Before the observation period there was a water and bathroom break in both conditions. Schematic diagram of one mini-experiment. This included a treatment lesson in nature and with walks to lesson site before and after or a control classroom lesson indoors, followed by a 5-min indoor break and min indoor observation period. Order of conditions was counterbalanced. Figure 4 shows how we replicated our fundamental unit of comparison across different instructional content, times in the school year, students, classrooms, and instructors. Each pair of lessons one in nature, one in the classroom was delivered in a single week. For each pair, the two teachers worked together to adapt a different theme from the Project Learning Tree [www.plt.org](http://www.plt.org). These two instructors each delivered 10 pairs of lessons over 10 different weeks in the semester from September–November, under a range of weather conditions.

1. Mini-experiments were replicated over 10 different topics and weeks, for each of two classrooms and each of five measures. To make the lessons as comparable as possible, each lesson pair was carefully matched along numerous dimensions. In addition, where exact matching was not possible we counterbalanced across the study so there were no consistent differences between conditions. For one notable dimension, neither matching nor counterbalancing was possible. Lessons were matched along the following dimensions: That is, for any given pair of lessons, both the treatment lesson in nature and its indoor counterpart were delivered by the same teacher to the same students, on the same topic, in the same week of the semester. Both lessons involved hands-on, experiential learning; lessons that required natural materials from the outdoor instructional site. We counterbalanced the order in which conditions were delivered each week over the course of the study. It is impossible to offer both a lesson in nature and its matched classroom lesson simultaneously; thus one lesson would have to precede the other and the second lesson would always be an extension of the first. So that neither condition would have an advantage over the other, we encouraged teachers to put the lesson in nature first roughly as often as they put it second. The scheduling of lessons was constrained by the scheduling of other curriculum. In the end, the lesson in nature came before its classroom counterpart four times and after it six times for each teacher. It is important to note that there was one consistent difference between the experimental and control lessons other than setting. The min lesson in nature was not purely instructional time; it required the class to walk a few minutes to and from a grassy area see Setting above to reach the instructional site—a distance of about m. Thus, the lesson delivered in nature was roughly 30 min long whereas the matched indoor lesson was 40 min long.

**Measures of Classroom Engagement** We developed a battery of four measures to assess classroom engagement: These four measures were then combined into a Composite Index of Classroom Engagement. Classroom engagement was defined for teachers as students listening to instructions, looking at assigned material, and raising their hands for assistance. Teachers were asked to rate the engagement not of individual students, but of the classroom as a whole, during the observation period.

**Student Ratings** Students also rated classroom engagement after each min observation period. Unlike the teacher ratings, the student ratings consisted of three components. Each student rated their own engagement, the engagement of the students sitting close to them, and the engagement of the class as a whole on a 5-point scale indicating the period of engagement from 1 no time to 5 the whole time. Of the three types of engagement ratings—self, peer, and whole class—one turned out to be relatively uninformative and was not further analyzed:

**Chapter 2 : Loop | Research Network**

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European Union[ edit ] In the European Union , the frontier is the region beyond the expanding borders of the European Union itself. EU has designated the countries surrounding it as part of the European Neighbourhood. This is a region of primarily less-developed countries, many of which aspire to become part of the union. Current applicants include Turkey and many small countries in the Balkans and South Caucasus. Romania and Bulgaria joined EU in 2007. If all or most East European states become members, the frontier may be the boundaries with Russia and Turkey. Muscovy and Russia[ edit ] The expansion of Russia to the north, south Wild Fields and east Siberia , the Russian Far East and Russian Alaska exploited ever-changing frontier regions over several centuries and often involved the development and settlement of Cossack communities. Settlers at the frontier thus frequently referred to themselves as "the outsiders" or "outside residents" and to the area in which they lived as "the outside districts". At times one might hear the "frontier" described as "the outside borders". The use of the word "frontier" was thus frequently connected to descriptions of frontier violence, as in a letter printed in the Sydney Morning Herald in December which described murder and carnage at the northern frontier and calling for the protection of the settlers saying: American frontier , British colonization of the Americas , French colonization of the Americas , and Spanish colonization of the Americas Voyageurs passing a waterfall The word "frontier" has often meant a region at the edge of a settled area, especially in North American development. It was a transition zone where explorers, pioneers and settlers were arriving. Frederick Jackson Turner said that "the significance of the frontier" was that as pioneers moved into the "frontier zone," they were changed by the encounter. For example, Turner argues in that in the United States, unlimited free land in this zone was available, and thus offered the psychological sense of unlimited opportunity. This, in turn, had many consequences such as optimism, future orientation , shedding the restraints of land scarcity, and the wastage of natural resources. In the earliest days of European settlement of the Atlantic coast, the frontier was any part of the forested interior of the continent lying beyond the fringe of existing settlements along the coast and the great rivers, such as the St. English, French, Spanish and Dutch patterns of expansion and settlement were quite different. Only a few thousand French migrated to Canada. These habitants settled in villages along the St. Lawrence river, building communities that remained stable for long stretches, rather than leapfrogging west the way the English and later Americans did. Although French fur traders ranged widely through the Great Lakes and Mississippi River watersheds, as far as the Rocky Mountains , they did not usually settle down. French settlement in these areas was limited to a few very small villages on the lower Mississippi and in the Illinois Country. They did not push westward. The typical English settlements were quite compact and small—under 3 square kilometres 1 square mile. Conflict with the Native Americans arose out of political issues, i. Early frontier areas east of the Appalachian Mountains included the Connecticut River valley. Most of the frontier movement was east to west, but there were other directions as well. The frontier in New England lay to the north; in Nevada to the east; in Florida to the south. Throughout American history, the expansion of settlement was largely from the east to the west, and thus the frontier is often identified with "the west. They emphasized the relationship between the center and periphery. Katerberg argues that "in Canada the imagined West must be understood in relation to the mythic power of the North. Innis considered place as critical in the development of the Canadian West and wrote of the importance of metropolitan areas, settlements, and indigenous people in the creation of markets. Turner and Innis continue to exert influence over the historiography of the American and Canadian Wests. The Quebec frontier showed little of the individualism or democracy that Turner ascribed to the American zone to the south. The Nova Scotia and Ontario frontiers were rather more democratic than the rest of Canada, but whether that was caused by the need to be self-reliant at the frontier itself, or the presence of large numbers of American immigrants is debated. Swiss immigrants camped on the shores of Lake Winnipeg in the autumn of 1811. The Canadian political thinker Charles Blattberg has argued that such events ought to be seen as part of a process in which Canadians

advanced a "border" as distinct from a "frontier" — from east to west. According to Blattberg, a border assumes a significantly sharper contrast between the civilized and the uncivilized since, unlike a frontier process, the civilizing force is not supposed to be shaped by that which it is civilizing. Blattberg criticizes both the frontier and border "civilizing" processes. Canadian prairies[ edit ] The pattern of settlement of the Canadian prairies began in , when the American prairie states had already achieved statehood. Like their American counterparts, the Prairie provinces supported populist and democratic movements in the early 20th century.

### Chapter 3 : Frontiers Media - Wikipedia

*Natural Frontier Market is a premier health food market offering a huge selection of organic and natural products such as grocery, produce, health & beauty, vit. & supp., juice & salad bar, and more.*

### Chapter 4 : Natural Frontier Market

*A frontier is the political and geographical area near or beyond a calendrierdelascience.com term came from French in the 15th century, with the meaning "borderland"—the region of a country that fronts on another country (see also marches).*

### Chapter 5 : Frontiers | Peer Reviewed Articles - Open Access Journals

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### Chapter 6 : Contact Us | New Frontiers Natural Marketplace

*I have just returned from a two week business trip to Asia where I visited China, Singapore and Malaysia. One of the things that struck me most on this trip was the degree to which Asia has leapt.*

### Chapter 7 : IBS-Nature Conference

*I loooooove Natural Frontier Market. Their prices are appreciably lower than its (sort of) natural food market neighbor, Greenbay, which I love going to whenever I'm in that part of Astoria.*

### Chapter 8 : Frontier - Wikipedia

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