Literatursammlung Fachbereich Lesen und Schreiben

Use of the Outdoor Classroom and Nature-Study to Support Science and Literacy Learning: A Narrative Case Study of a Third-Grade Classroom

Eick, C. (2012). Use of the Outdoor Classroom and Nature-Study to Support Science and Literacy Learning: A Narrative Case Study of a Third-Grade Classroom, Journal of Science Teacher Education, 23:7, 789-803.

Abstract
A case study of an exemplary third grade teacher's use of the outdoor classroom for meeting both state science and language arts standards is described. Data from the researcher's field journal, teacher lesson plans, and teacher interviews document how this teacher used nature-study to bridge outdoor classroom experiences with the state science and language arts curriculum. This teacher's early life experiences supported her strong interest in science and nature in the outdoors and experiencing it with her children. Children interacted with the outdoor classroom throughout the day as a context for science and literacy learning. All but one child successfully met Annual Yearly Progress (AYP) goals in reading at the end of the school year.

Zum Artikel

Developing critical literacy skills through using the environment as text

Chambers, J. M., & Radbourne, C. L. (2015). Developing critical literacy skills through using the environment as text. Language and Literacy, 17(1), 1–20.

Abstract
Through a project funded by the Ontario Ministry of Education called the Teacher Leadership and Learning Program (TLLP), teachers in a Grade 2 and a Grade 6 class incorporated the outdoor environment as a teaching text to develop critical literacy skills of their students. The findings of our interviews with them showed improvement in literacy abilities, particularly for Indigenous learners. In addition to improving their literacy skills, the children in the study also developed respect and caring for their place, the environment, and for one another. Framed by ecosocial theory, this research demonstrated the children's abilities to utilize critical literacy skills to 'read their world'

Zum Artikel

A forest-based environment as a site of literacy and meaning making for kindergarten children

Streelasky, J. (2018). A forest-based environment as a site of literacy and meaning making for kindergarten children.

Abstract
This study analyses the valued school experiences of 15 five- and six-year-old Canadian children, through their creation of multimodal texts. Throughout the school year, the students spent a large portion of each school day

in the expansive forest on the school grounds, and their texts revealed their significant interest in this natural outdoor environment. Specifically, the data revealed that the outdoor space provided a context where the children could engage with each other and the environment in meaningful, creative and collaborative ways. This research has the potential to contribute to our understanding of the capacity of young children to share their thoughts on their school experiences by drawing on a range of modes and to contribute to our understanding of the power of alternative learning spaces, such as forest environments, on children's literacy learning and development.

Zum Artikel

The Diluted Curriculum: The Role of Government in Developing Ecological Literacy as the First Imperative in Ontario Secondary Schools

Puk, T. & Behm, D. (2003). The Diluted Curriculum: The Role of Government in Developing Ecological Literacy as the First Imperative in Ontario Secondary Schools. Canadian Journal of Environmental Education.

Abstract
In 2000, the Ontario Ministry of Education removed Environmental Science from the secondary school curriculum as single-focus, stand-alone courses. Instead, the Ministry chose to integrate or "infuse" ecological concepts in other science and geography courses. In this study, surveys were sent out to science and geography teachers across the province. Teachers were asked whether or not they taught various topics, how much time they spent teaching these topics, and how much time they spent per course teaching outdoors. The data collected from the surveys demonstrate that grade 9/10 and grade 11/12 science and geography teachers are, in fact, spending very little time teaching ecological concepts. There is a limited and ineffective emphasis on learning about environmental science topics or promoting ecological literacy in the current curriculum guidelines. The results of the study indicate the failure of the "infusion model" for ecological education. The study suggests that in light of the serious challenges the ecosphere faces in the future, ecological literacy must become the first imperative in the school curriculum.

Zum Artikel

Developing sustainability-literate citizens through outdoor learning: possibilities for outdoor education in Higher Education

Lugg, A. (2007). Developing sustainability-literate citizens through outdoor learning: possibilities for outdoor education in Higher Education, Journal of Adventure Education and Outdoor Learning, 7:2, 97-112, DOI: 10.1080/14729670701609456.

Abstract
UNESCO's challenge to Higher Education institutions to provide educational leadership in sustainable development, provides an impetus to develop innovative, interdisciplinary curricula and pedagogy. Whereas Higher Education curricula in sustainability and sustainable development have tended to come from the environmental sciences, recent studies have highlighted the need for more holistic, experiential, interdisciplinary approaches. As a pedagogical approach, outdoor learning may have something to offer since it

lends itself to holistic and experiential learning and enables integration of knowledge and skills from a range of discipline areas. Outdoor and environmental education research suggests that educational experiences in outdoor settings can be significant in developing environmental sensitivity and knowledge. Such knowledge and attitudes are components of ecological literacy and, more recently, sustainability literacy. This paper considers how outdoor experiential pedagogy might contribute to the current sustainability education agenda. It focuses on Higher Education since this sector has the obligation and the capability of instigating a 'ripple' effect' in developing sustainability-literate citizens. It discusses possibilities and issues arising from a review of outdoor, environmental and sustainability education literature, particularly, but not exclusively, from the UK. The paper is a precursor to an empirical study into how outdoor learning might contribute to the development of sustainability-literate graduates.

Zum Artikel

Does Outdoor Education Make any Difference in Environmental Literacy of Pre-service Classroom Teachers?

Derman, A., Sahin, E. & Hacieminoglu, E. (2016). Does Outdoor Education Make any Difference in Environmental Literacy of Pre-service Classroom Teachers? International Journal of Environmental and Science Education, 11(15), 8491-8506.

Abstract

The aim of this research is to determine the effects of various teaching methods and activities, which are used in environmental education lessons, on the environmental literacy level of classroom pre-service teachers. This study was carried out including the classroom pre-service teachers, who took the environmental education course in the academic year of 2012-2013. In this study, an experimental design was used. The Environmental Literacy Scale and the Evaluation of the Environmental Education Outcome Scale, which was developed by the researchers, were utilized as data collection instruments. The implementations were carried out throughout the semester. During the semester, traditional teaching methods (lecture type) were used in the control group, while teaching methods in which the pre-service teachers were active in the outdoor and indoor were used in the experimental group. Regarding the quantitative data, descriptive analysis, paired-samples t-test, Independent Samples T-Test analysis were utilized. Content analysis was used for the analysis of the data obtained from the open-ended questions. The findings showed that there was a statistically significant difference in favor of the experimental group with respect to the "attitudes", "uses," and "concern" dimensions of the environmental literacy. When the pre-test and post-test results of the control group were compared within the group, no any significant difference was found. Yet, a significant difference in the dimensions of "attitudes" and "uses" was found when the pre-test and the post-test results were compared within the experimental group. The classroom pre-service teachers in the control group gave very positive feedback on the issues of "the outcomes they obtained from the environmental education course", "teaching topics related to environmental education when become teachers," and "environmental problems." Richer codes and higher frequencies were obtained from the experimental group on these categories.

Zum Artikel

Stories in the Land: A Place-Based Environmental Education Anthology. Nature Literacy Series Number 2.

The Orion Society. (1998) Stories in the Land: A Place-Based Environmental Education Anthology. Nature Literacy Series Number 2.

Abstract
This anthology collects stories from various classrooms and collaborations supported by the Orion Society. Orion's Stories in the Land fellowships are 1-year teacher stipends that promote effective place-based education: interdisciplinary studies of the local natural and cultural history using extensive field experiences and diverse "human resources." The Watershed Partnerships program was a loose consortium of collaborations between colleges and their local schools for the purpose of discovering, sharing, and celebrating the local environment. Each narrative from these programs is accompanied by a class activity. An introduction, "Teaching at the Edge" (John Elder), reflects on the educational principles that bind these stories together and suggests four fundamental themes: attentiveness to students' home landscapes, convergence of natural sciences and the arts, time spent outdoors, and sense of community fostered through human connections. The narratives and their activities are: (1) "Science and Stories in a North Philadelphia Neighborhood" (activity: looking for changes) (Mark Basnage); (2) "A Place To Begin: Encouraging Community and Sense of Self in the Interdisciplinary Classroom" (activity: book making) (Kurt Caswell); (3) "Exploring Nature: Science and English in Conversation" (activity: creating an environmental magazine) (Jennifer Danish); (4) "Monterey Bay: A Sanctuary of Promise" (activity: make a place map in your schoolyard) (Bonnie Dankert); (5) "Treasuring the Tetons" (activity: a day on the river) (Jo Anne W. Kay); (6) "Opening the Door for Young Naturalists" (activity: young naturalist journals) (Daniel Kriesberg); (7) "Wetland Wisdom" (activity: creature feature bags) (JoAnn Kruzshak, Debbie Levy); (8) "Tracing Our Culture Back to Its Roots" (activity: experiencing poetry) (Lorain Varela); (9) "Getting To Know the Lake Champlain Bioregion" (activity: environmental education journal) (Thomas R. Hudspeth); (10) "Finding Our Place on the Trail" (activity: spring journal and trail guide) (Alice Leeds); and (11) "Acquiring Felt Knowledge" (activity: finding home, a mapping activity) (Nicole J. Greene). Appendices describe a college seminar on environmental education with internships in local schools, and list readings and resources.

Zum Artikel

A Day Hike Designed to Promote Environmental Literacy

Hutson, G., Weber, H. (Assistant Upward Bound Director) (2008). A Day Hike Designed to Promote Environmental Literacy, SCHOLE: A Journal of Leisure Studies and Recreation Education, 23:1, 103-107, DOI: 10.1080/1937156X.2008.11949614

Abstract
This paper introduces a theoretical framework and practical means of teaching environmental literacy through the explanation of a structured day hike experience with university students along the Bruce Trail in the Niagara Region of Ontario, Canada. Environmental literacy is about deeply knowing the details and histories of particular settings and has become increasingly popular for directing outdoor and environmental education experiences. However, what it means to be environmentally literate is a topic for debate and is often difficult to articulate and describe to those who are unfamiliar with the term. Stables (1998) described an environmental literacy framework that is useful for teaching different ways of learning about and experiencing natural environments. Stables' framework was based upon functional, cultural, and

critical elements, which coalesce to create a holistic approach to understanding environmental literacy. The purpose of this article is to describe an interactive approach for teaching environmental literacy by using a theoretical framework as a guide for practice.

Zum Artikel

Addressing Barriers to Ecological Literacy

Monaghan, K., Curthosy, L. (2008). Addressing Barriers to Ecological Literacy. Pathways: The Ontario Journal of Outdoor Education, v20 n3 p12-16.

Abstract
The article focuses on the significance of ecological literacy to address the current environmental concerns in Ontario. According to the author, the process of nurturing ecologically literate citizenry is not straightforward, but through a process using outdoor education that centers on natural world and experiential learning. The article also defines ecological literacy as more than just a measure of one's ecological knowledge, but as well as to measure one's ability and willingness to utilize his/her knowledge in order to live a more sustainable life.

Zum Artikel

A forest-based environment as a site of literacy and meaning making for kindergarten children

Streelasky, J. (2019) A forest-based environment as a site of literacy and meaning making for kindergarten children. Literacy, 53: 95– 101.

Abstract
This study analyses the valued school experiences of 15 five- and six-year-old Canadian children, through their creation of multimodal texts. Throughout the school year, the students spent a large portion of each school day in the expansive forest on the school grounds, and their texts revealed their significant interest in this natural outdoor environment. Specifically, the data revealed that the outdoor space provided a context where the children could engage with each other and the environment in meaningful, creative and collaborative ways. This research has the potential to contribute to our understanding of the capacity of young children to share their thoughts on their school experiences by drawing on a range of modes and to contribute to our understanding of the power of alternative learning spaces, such as forest environments, on children's literacy learning and development.

Zum Artikel

Developing ecological literacy in a forest garden: children's perspectives

Hammarsten, M., Askerlund, P., Almers, E., Avery, H. & Samuelsson, T. (2019). Developing ecological literacy in a forest garden: children's perspectives, Journal of Adventure Education and Outdoor Learning, 19:3, 227-241, DOI: 10.1080/14729679.2018.1517371

Abstract

Today, cities become more dense, green spaces disappear and children spend less time outdoors. Research suggests that these conditions create health problems and lack of ecological literacy. To reverse such trends, localities are creating urban green spaces for children to visit during school time. Drawing on ideas in ecological literacy, this study investigates school children's perspectives on a forest garden, a type of outdoor educational setting previously only scarcely researched. Data were collected through walk-and-talk conversations and informal interviews with 28 children aged 7 to 9. Many children in the study expressed strong positive feelings about the forest garden, the organized and spontaneous activities there, and caring for the organisms living there. We observed three aspects of learning in the data, potentially beneficial for the development of children's ecological literacy: practical competence, learning how to co-exist and care, and biological knowledge and ecological understanding. (PsycInfo Database Record (c) 2020 APA, all rights reserved)

Zum Artikel

Content Knowledge and Vocabulary Learning in Nature: Becoming a Nature Scientist!

Han, M., Edwards, N. and Vukelich, C. (2014). "Content Knowledge and Vocabulary Learning in Nature: Becoming a Nature Scientist!", Learning Across the Early Childhood Curriculum (Advances in Early Education and Day Care, Vol. 17), Emerald Group Publishing Limited, Bingley, pp. 73-93.

Abstract

The purpose of this chapter is to suggest ways for early childhood teachers to teach science content knowledge, vocabulary, respect, and an appreciation for nature while children engage in meaningful outdoor nature activities. Science concepts such as nature, life cycle, observation, and experimentation can be woven into outdoor activities as children pretend to be nature scientists. Intentional planning provides teachers with the opportunity to integrate science content knowledge and vocabulary learning during the nature study. The careful selection of content vocabulary related to the scientific process and science content knowledge helps' children learn new words in meaningful and developmentally appropriate ways. This chapter provides several examples of outdoor nature activities with science content knowledge and vocabulary embedded into each activity.

Zum Artikel

Partnerships Gone WILD: Preparing Teachers of Young Children to Teach about the Natural World

Crim, C., Desjean-Perotta, B., Mosley, C. (2012). Partnerships Gone WILD: Preparing Teachers of Young Children to Teach about the Natural World. Childhood Education. 85. 6-12. 10.1080/00094056.2008.10523050

Abstract

The University of Texas at San Antonio is preparing teachers of young children to be effective environmental educators through Project WILD. All preservice teachers receive a full day of Project WILD training, as part of their course requirements for a methods course in teaching math and science to young children, in one of the five natural areas managed by San Antonio's Parks and Recreation Department. The six-hour workshop is centered around the conceptual framework of environmental literacy development and training is followed up with class assignments in which the preservice teachers are required to use Project Wild activities. The training has helped preservice teachers to become aware of, and to interact with, the natural areas around San Antonio and has influenced their perceptions of the environment and their understanding of the important role local areas play in teaching young children about the connection between themselves and the natural world.

Zum Artikel